



Chippewa Moraine State Recreation Area

Draft Master Plan

September 2017

Wisconsin Department of Natural Resources

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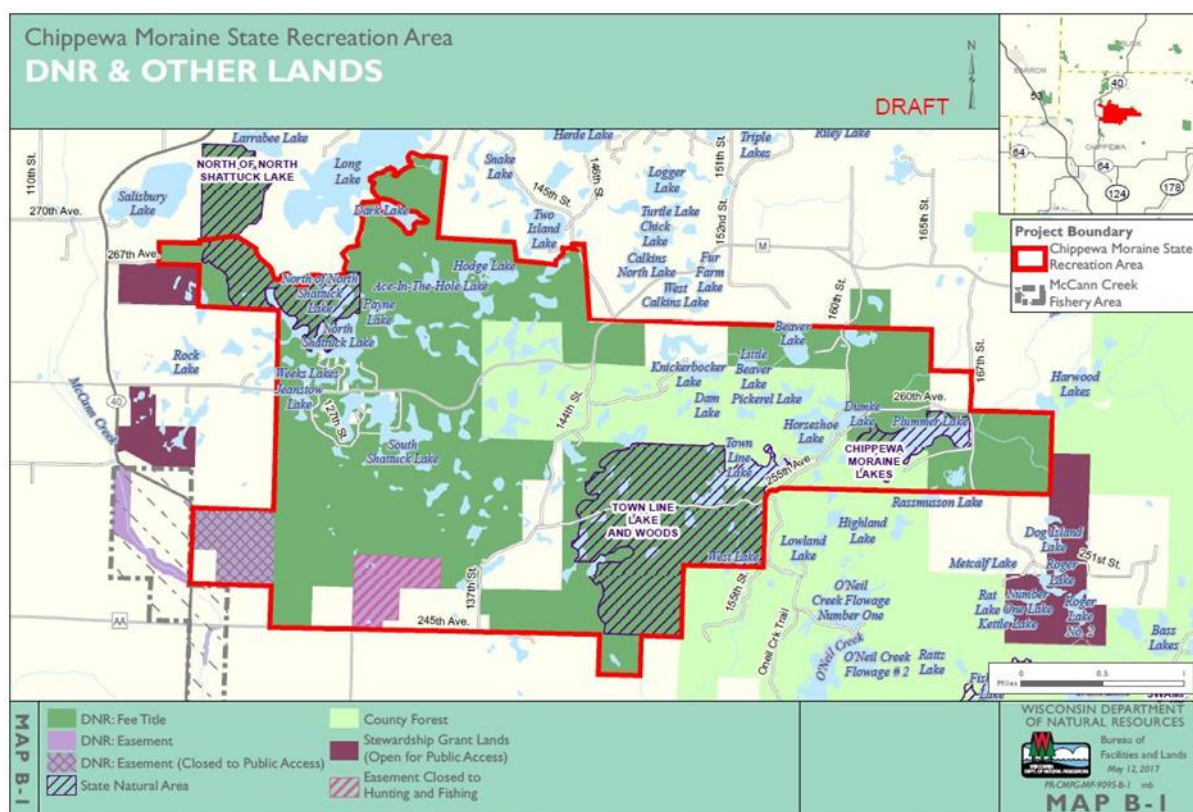
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CHAPTER ONE: INTRODUCTION AND PLAN OVERVIEW

I. OVERVIEW AND SIGNIFICANCE OF THE PROPERTY

The 3,568 acre Chippewa Moraine State Recreation Area (CMSRA) is largely forested and dotted with kettle lakes, wetlands and unique glacial features. The property offers a variety of high quality non-motorized, pedestrian based recreational and nature educational opportunities. The CMSRA was established in 1971 and classified as a state park. This designation provided the state with authority to purchase the land and manage for preservation, education and recreation. The property was reclassified as a state recreation area as part of the 1990 master planning effort.



The CMSRA is coincident with the Chippewa Moraine Unit of the Ice Age National Scientific Reserve. This 4,400 acre unit is one of nine units of the **Ice Age National Scientific Reserve** (dnr.wi.gov, keywords “ice age reserve”). The reserve is an affiliated area of the National Park System. The Ice Age National Scientific Reserve (IANSR) was established in 1964 to “assure protection, preservation, and interpretation of the nationally significant values of the Wisconsin continental glaciation, including moraines, eskers, kames, kettleholes, drumlins, swamps, lakes, and other reminders of the ice age” (Act of October 13, 1964, 78 Stat. 1087, 16 U.S.C. 469d). Most of these units are connected by the Ice Age National Scenic Trail. The Units protect different areas of scenic and scientific value and provide a place for outdoor recreation opportunities such as studying Wisconsin’s natural history at one of the interpretive centers,

hunting, hiking, camping, snowshoeing, ice fishing, sightseeing and wildlife viewing. The land inside of the bold line on the map above is the IANSR.

The David R. Obey Ice Age Interpretive Center, built in 1991, is the property's primary visitor attraction. The building's construction was partially funded by the National Park Service. Its ongoing operation and exhibit upkeep are funded by the DNR. It contains a classroom, a large exhibit room with multimedia presentations, a gift shop area, a greeting desk, office space, break/meeting room, rest rooms, a fireplace and an area for live animal exhibits.



Figure 1: David R. Obey Ice Age Interpretive Center

Visitation at the center has ranged from 14,000 to 16,000 people annually. Additionally, the center has played an important role in school programs. Twenty different school districts across a seven county area have been bringing over 4,000 students per year to the center to see, touch, hear and discover Wisconsin's natural and cultural history. Finally, the visitor center and its parking area provide a safe location for overnight storage of vehicles while on the Ice Age Trail for multiple days.

In addition to the important education and interpretation role of the property, the other primary focus is low key, lightly developed non-motorized recreation in a natural setting with an atmosphere of solitude and remoteness where visitors may experience a connection with the natural landscape. Away from the visitor center, hiking and enjoying self-guided nature trails is the primary activity on the 10 miles of trail. About half of these miles are on a segment of the National Ice Age Trail. Other popular activities on the property are paddling, fishing, hunting, and wildlife and scenic viewing. Three remote, primitive hike/paddle-in campsites offer a unique camping experience.

CHIPPEWA MORaine STATE RECREATION AREA

The CMSRA and Reserve is bisected by the Ice Age National Scenic Trail (dnr.wi.gov, keyword “ice age trail”) which is one of America’s eleven National Scenic Trails and was authorized by the U.S. Congress in 1980. A national as well as a state scenic trail, the 1,000-mile Ice Age Trail will ultimately go from Interstate Park to Potawatomi State Park. The Ice Age Trail is predominantly an off-road hiking trail and preserves some of the finest features of Wisconsin’s glacial landscape as well as other scenic and natural resources. The trail is sponsored by the Ice Age Trail Alliance, which is a private organization. The DNR assumes primary responsibility for management of the trail segments that lie on its own properties.

In addition to the nationally significant geologic features on the CMSRA, important natural communities and habitats are present as well. In particular, they include larger blocks of high quality older southern dry-mesic forest, providing habitat for species such as forest interior birds. Part of one and all of two State Natural Areas (SNAs) are on the CMSRA.

The CMSRA is managed by the Bureau of Parks and Recreation with some assistance from wildlife management and forestry staff. To date, active resource management activities have primarily been conducting prescribed burns on the interpretive center hill. The forest lands have been passively managed.

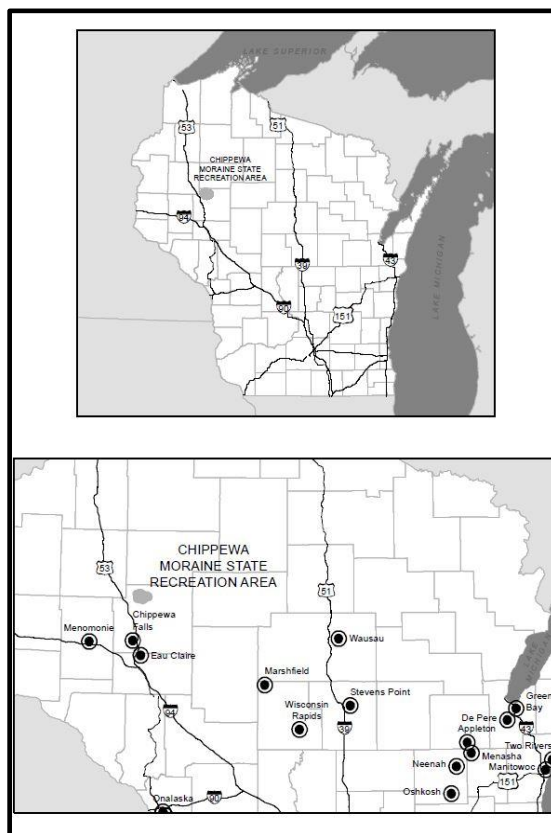


Figure 2: Property Location

II. MANAGEMENT AUTHORITY

State recreation areas are managed and administered by the state parks program in accordance with Wisconsin Stat. s. 23.09. The primary purpose of recreation areas is to provide multiple high quality outdoor recreation opportunities, provide regional or urban recreation opportunities, or for preservation of important resources. Unlike other property destinations,

This is your plan. The CMSRA master plan addresses people's desires for the future. Wisconsinites want their natural resources sustained for future generations. At the same time, they expect a full range of environmental, social, and ecological benefits today and in the future. This plan attempts to achieve that balance in a scientifically credible and sustainable way. It was developed with countless hours of expert staff and public input and several rigorous scientific and technical reviews. Many hands were involved in shaping it.

This is a visionary plan. The master plan captures an idealized view of the Chippewa Moraine's long-term future and provides a general direction for short-term actions. The diversity and quality of the Chippewa Moraine's habitats and native communities and recreational opportunities are enhanced over time, providing for a broad range of social and ecological values important to Wisconsin citizens, including recreation.

This is a focused plan. The master plan calls for active and passive management across the landscape and over time to achieve its goals and objectives. It relies on integrated and adaptive management of the resources and focuses on the compatibility of uses over time.

This is a flexible and adaptive plan. The master plan calls for adaptive management and monitoring the response to strategies outlined in the plan. The responses are evaluated against the objectives. The plan calls for continuous monitoring and regular public reviews and a major review every 15 years.

formal "zones" can be incorporated within the property and the recreation uses and number of people using the zones may be limited. This provision is intended to be applied where the department believes it is necessary or appropriate to improve visitors' experiences or minimize impacts to sensitive resources.

III. PLAN PURPOSE AND NEED TO REVISE

Property master plans outline how a property will be managed, used and developed, and the benefits it will provide. It defines the land and water management practices, recreational uses, other management activities, and additional aspects of the property's future use and development.

The revised plan reflects changing ecological, economic, and social conditions, and current management principles for resource and recreation management in the context of the larger landscapes as required by Wisconsin Administrative code NR 44 and NR 1.60. The master plan will receive a formal review approximately every 15 years and will be updated by plan amendments and variances as necessary through a formal process that includes public involvement.

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The original plan for the CMSRA was approved by the Natural Resources Board in 1990. The plan is being revised due to the age of the plan, 27 years, the requirement that all property plans meet the newer NR 44 plan standards, as well as the need to revise the plan in light of changing ecological, economic, and social conditions, and to incorporate new information. At any time, if necessary, the plan may also be updated by plan amendments and variances through a formal process that includes public involvement.



IV. PLAN OVERVIEW

This plan continues to protect the outstanding nationally significant geologic features that are the basis for establishment of the property. It also provides interpretive and educational opportunities related to the property's geologic and natural history. Beyond the visitor center, the recreational focus continues to be on high quality, low-impact, non-motorized activities.

Management under this plan will maintain and, where opportunities allow, enhance the high ecological integrity of the property's forest, wetland and aquatic native communities and habitats. Of particular note is the plan's support of habitat for "species of greatest conservation need", such as the cerulean warbler and red-shouldered hawk. Parts of the property will serve as an ecological reference area. These and other management strategies in the plan will continue to maintain the property's somewhat wild and undeveloped character where visitors may enjoy solitude and sense of remoteness.

RECREATION MANAGEMENT

The revised plan maintains the range of recreational uses on the Chippewa Moraine that people have enjoyed for decades while enhancing some existing facilities and adding a few new facilities.

The proposed plan will maintain and in some cases expand the property's existing recreational facilities and opportunities. The property's extensive hiking trail system, which includes five miles of the Ice Age Trail, will be expanded from 10 miles to 17 miles. A portion of these trails also serve as interpretive trails.

The CMSRA currently provides a rather unique type of camping – remote, primitive hike/paddle-in camping. Eight new sites are proposed to be added to the existing three sites.

The current two small boat access sites on the property will be maintained without change, and a carry-in paddle craft landing on Hodge Lake will be added.

Hodge Lake will be managed to provide a quality panfishery. Fishing opportunities will be maintained on the other lakes as is practicable, as many experience periodic winter fish kills. The CMSRA will continue to offer opportunities for hunting and trapping in a somewhat wilderness setting.

A number of old buildings and structures remain on the property acquired from the Sybaquay Girl Scout Camp. With the exception of the two garages at the camp manager residence, all of the buildings at the old girl scout camp, (Hodge Lake area) will be removed.

RESOURCE MANAGEMENT

Forests, wetlands, lakes

Chippewa Moraine State Recreation Area hosts a rare combination of unique natural and geologic features along with areas of little development offering solitude and remoteness. Notable features include; scenic undeveloped lakes and wetlands, and large blocks of oak, southern and northern hardwood forest habitats, the kettle lakes and other geologic/glacial features. The proposed management will maintain and enhance these natural features and habitats and natural appearing, largely undeveloped landscape. The plan emphasizes:

- Maintaining and expanding (on suitable sites) oak dominated forest stands and areas with larger blocks of closed canopy forest.
- On appropriate sites, managing for larger, older trees and the development of old growth forest characteristics.
- Maintaining an attractive, natural appearing forest.
- Protecting and maintaining the area's high quality wetlands, ephemeral ponds and lakes.
- Maintaining certain primary geological sites in grassland cover to facilitate viewing and interpretation.
- Conducting timber harvests and other management activities in ways that maintain scenic quality near trails and campsites and minimize impacts on visitors to the degree practicable.
- Control of invasive species.

Passive forest management (no harvest) remains the primary tool for a large portion of the property. While the department has not used timber harvests as a management tool on the CMSRA in the past, targeted harvests and controlled burns for some parts of the property are proposed under this plan. These are important tools for meeting the ecological and habitat goals in these locations.

There are three state natural areas on the CMSRA. Two are proposed to be expanded by a total of 373 acres. All of the SNA expansion lands are currently under department ownership and management.

Fish

There are 22 lakes wholly or partially within the CMSRA property boundary. Most are small, being less than 50 acres. However, a diverse fishery is present with panfish present in nearly all (except where winter freeze-out is a recurring problem) and with largemouth bass and northern pike being the most common larger game fish. Small-mouth bass and walleye are present in a few lakes.

Hodge Lake provides a quality panfishery. The management objective here is to provide and maintain a quality panfishery with a special focus on bluegill. Fishery surveys will be conducted here on a periodic basis and bag limits will be adjusted as necessary to maintain the fishery.

On other lakes, the overall objective is to maintain a sustainable fishery as is practicable given the fisheries habitat limitations. To that end, fishery surveys will be conducted on a periodic basis and stocking to rehab the fishery after a winter kill will be considered. A surface aeration system would reduce and most likely eliminate winterkill occurrences. If there is local support and funding, one may be considered for South Shattuck Lake.

Proposed Boundary Expansion

- *Inclusions of managed lands in state ownership:*

The project boundary is proposed to be expanded to include: an adjacent parcel that is in state ownership and under DNR management (126 acres). This parcel (part of North of North Shattuck Lake State Natural Area) provides important habitat value and investments in vegetation management have been made.

The CMSRA boundary bisects the North of North Shattuck Lake State Natural Area. The whole SNA tract is owned and managed by the department and is covered by this master plan. For “housekeeping” purposes the department proposes to expand the CMSRA property boundary to include all of this SNA within its boundary, an addition of 126 acres.

CHAPTER TWO: MANAGEMENT USE AND DEVELOPMENT

I. PROPERTY VISION

The Chippewa Moraine State Recreation Area conserves a rare combination of natural and geologic features for present and future generations. The site's location in rural Chippewa County offers an atmosphere of solitude and remoteness where visitors may experience a connection with the natural landscape. The Chippewa Moraine property's many unique features include; scenic undeveloped waters, wetlands, large blocks of oak, southern and northern hardwood forests, habitats harboring rare species, and the various glacial geologic features of statewide and nationwide significance. Because of the site's geologic importance, a segment of the Ice Age National Scenic Trail runs through the property, providing visitors with a semi-primitive hiking and camping experience. The property also offers opportunities to enjoy a variety of other high quality non-motorized, pedestrian based recreational and nature educational opportunities. Management practices, recreational facility development and public use of the property are sustainable and are within the ecological and social carrying capacity of the property and its recreational setting.

II. PROPERTY GOALS

Protect the outstanding nationally significant geologic features that are the basis for establishment of the property. Provide interpretive and educational opportunities related to the property's geologic and natural history for visitors of all ages from across the region.

Provide and maintain the high ecological integrity of the property's native communities and habitats for waterfowl, fish and other wetland and aquatic wildlife.

Provide blocks of closed canopy forest which is habitat for "species of greatest conservation need" such as the cerulean warbler and red-shouldered hawk.

Provide and maintain an oak-dominated forest ecological reference area.

Maintain and enhance the wild character of the property to provide recreational experiences of solitude and remoteness accommodating a range of low-impact, non-motorized recreational uses; particularly hiking, canoeing/kayaking, and primitive camping.

Provide appropriate, high quality recreational facilities to support the goals for the Chippewa Moraine State Recreation Area, doing so in sustainable ways which maintain the property's geologic, ecological and scenic values.

Encourage individuals and the regional community to become physically active by exploring the unique recreational opportunities and character of the Chippewa Moraine property.

III. LAND MANAGEMENT AREAS AND LAND MANAGEMENT CLASSIFICATION

The CMSRA has been divided into eight land management units. Each unit is assigned a land management classification, which is discussed further below. There two Native Community Management units and five Recreation Management units, the remaining area is assigned to Habitat Management (see Map B-1). The classifications are defined further below. Each management area is determined based on unique site-specific habitat or community types and characteristics or the presence of exceptional recreational use opportunities as

well as the desired future condition for the area. These factors shape the area-specific management objectives and prescriptions.

A land management “classification” further clarifies the primary uses or management objectives for a property or sub-area within a property. The classification system is defined in WI Administrative Code (NR 44.06). Of course, the vast majority of department properties meet multiple conservation and recreation objectives. For example, an area classified as a Habitat Management Area can offer a range of recreation opportunities ranging from hunting to snowshoeing. Similarly, lands classified as Recreation Management Areas will often be managed to provide multiple habitat benefits in addition to providing camping, hiking and other developed recreation settings. In sum, land management classifications represent a primary use, but a wide range of conservation and recreation outcomes are possible.

All lands within the National Resources Board approved project boundary are assigned a land management classification that reflects the primary management or use focus for the management area. If private lands lie within the project boundary, as is usually the case, the classification only indicates what the most likely management focus would be on those lands if they are purchased and included under the master plan in the future. Some homogenous properties have only one land classification for the whole property, and complex properties will have several or many different management areas. Each management area will be assigned a land management classification.

The lands covered under the CMSRA master plan fall into one of the following land management classifications:

Native Community Management Areas are managed to represent, restore and perpetuate native plant and animal communities, whether upland, wetland or aquatic, and other aspects of native biological diversity.

Recreation Management Areas are managed to provide and maintain land and water areas and facilities for outdoor public recreation or education.

Recreational Use Setting Sub-classifications: There are four sub-classes within Recreation Management Areas that further describe the general recreational setting or “feel” of the area – that is, the level of remoteness, intensity of interactions with other visitors, ease of access, and level of development of recreation facilities. Type 1 Settings are the least developed and provide a remote setting where visitors can experience solitude and independence. Only a limited amount of department lands are classified as Type 1 with most being large wilderness areas. At the other end of the spectrum are Type 4 Settings, which may provide for intensive recreational opportunities and have the most development (e.g., facilities that provide a high level of comfort for visitors, convenience, and environmental protection). Lands within the CMSRA are proposed to range between a Type 2, Type 3 and Type 4 Setting sub-classifications.

Table 1: Land Management Classifications

Management Classification	Recreation Setting	Acres
Recreation Management Area	Type 3_ Non Motorized*	1,477
Recreation Management Area	Type 2	888
Recreation Management Area	Type 4	88
Native Community Management Area	N/A	1,470

IV. RECREATION AND FACILITIES MANAGEMENT

Recreation management areas are managed with the primary objective of providing and maintaining land and water areas and facilities with a particular focus on outdoor recreation and education. Management activities to

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achieve habitat, native community, or scenic management objectives may also occur in these areas. See Map B-2A and Map B-2B for existing and proposed recreation infrastructure and Map B-2C and Map B-2D for the existing and planned road infrastructure.

INTERPRETATION AND EDUCATION

(Recreation Management Area Type 4 - Interpretive Center and Administrative Facilities Area)

This 88 acre Recreation Management Area centers on the David R. Obey Ice Age Interpretive Center. The Interpretive Center was built in 1991 and is key to the success of the interpretive and education program on this property. The building's construction and exhibit development were partially funded by the National Park Service. Its operation and upkeep costs have been funded through the DNR.

The building contains a classroom, a large exhibit room with multimedia presentations, a gift shop area, a greeting desk, office space, break/meeting room, rest rooms, a fireplace and an area for live animal exhibits. Outside there is a native plant demonstration area and a parking lot that accommodates about 50 vehicles. Additionally, the building and grounds offer expansive views of the surrounding landscape, featuring views of the glacial moraine as well as the unglaciated hills in the distance.

In addition to the interpretive center facility, the interpretive program includes approximately seven miles of self-guided nature trails on the property outside of the management area.

Education and interpretation program:

Because interpretive and education needs, capabilities, partnership opportunities and delivery systems change over time; specific education/interpretation programming will be guided by a separate property education/interpretation implementation plan that can easily be adjusted as necessary.

While the interpretive center will be the focal point for delivery of the interpretive and education program, the CMSRA will also take advantage of various opportunities on the property, such as trails. The implementation plan primarily covers the components of the programming and delivery systems. These may be adjusted over time without a change in the property master plan as long as they are consistent with the master plan objectives. Significant future changes in the infrastructure needed to support the interpretation efforts may require a property master plan variance to allow construction.

Interpretive and educational themes that typically might be included (but are not necessarily limited to) in a CMSRA interpretation/education program are:

- Wisconsin's glacial geology
- Wisconsin's natural and cultural heritage (such as voyageurs and fur trade)
- Native plants and communities
- Wildlife (species and ecology)
- Fisheries and aquatic habitats
- Resource management activities
- Outdoor skills and
- Other pertinent conservation and natural history topics

Management Objectives

Provide a self-guided education and interpretation program focused on the Chippewa Moraine's many glacial and geologic features of statewide and nationwide significance.

With the support of a cooperating partner or partners, provide staff-led public educational programs on glacial history and geology, ecology and natural history and other relevant topics, such as cultural history and outdoor skills.

Provide facilities and areas that support the delivery of public services and educational programming, as well as meet operations and administrative facility needs.

Encourage educational activities, and workshops or other public programs supported by partners, such as the Ice Age Trail Alliance, that are consistent with the property's primary management purposes.

Management Prescriptions

Maintain the existing interpretive center as necessary to meet administrative, educational and facility management needs. Maintain the grounds (turf, trees, etc.) around the interpretive center as appropriate to enhance building maintenance and to ensure visitor safety. As appropriate for improved aesthetics and visitor education through interpretation, utilize native landscape plantings and interpretive signs in strategic locations. Away from buildings, manage the landscape to sustain existing native habitats and provide for visitor education through interpretation. As appropriate, maintain features such as bird feeders, a rain garden, wildflower garden and the prairie flower garden.

Seek a cooperating partner or partners to assist with operations of the public information/education program. With a cooperating partner, provide on-site programs to visiting school groups and others utilizing the visitor center, its grounds, and the property's connected trail system as outlined in a property interpretation/education implementation plan.

If future use demand warrants and funding is available, construct a picnic shelter with a capacity of up to 80 people near the interpretive center. The shelter will be similar in design to the CCC shelter at Brunet Island State Park, that is with both ends enclosed and the center of the shelter open. The building will have a fireplace and bench seating.

As opportunities are available, expand and/or enhance interpretive opportunities on the trail system and access points through signage or other forms of information delivery.

DESIGNATED TRAILS

Ice Age National Scenic Trail

The CMSRA is bisected by the Ice Age National Scenic Trail (dnr.wi.gov, keyword “ice age trail”) which is one of America’s 11 National Scenic Trails and was authorized by the U.S. Congress in 1980. The trail is also one of 43 designated Wisconsin state trails and the only one specifically designated as a State Scenic Trail. The 1,000-mile Ice Age Trail will ultimately go from Interstate Park in the western part of the state to Potawatomi State Park in Door County. It is predominantly an off-road hiking trail and preserves some of the finest features of Wisconsin’s glacial landscape as well as other scenic and natural resources. The Wisconsin Department of Natural Resources and its partners, the National Park Service and the Ice Age Trail Alliance, cooperatively work together to develop and maintain the Ice Age Trail.

On the west end of the CMSRA, the Ice Age Trail continues west along a gravel town road, then on to STH 40 for about one mile north to 117th Street. DNR partners wish to continue the trail off road in the future, along the east shore of Salisbury Lake to a new trail head on STH 40 directly across from 117th Street. This would delete the mile trail section that is along STH 40 and make for a more pleasant hiking experience and would increase awareness of the trail by placing the trailhead on a well-traveled road.

Hiking and Interpretive Trails

In addition to the Ice Age Trail, there are seven miles of loop hiking trails on the CMSRA, originating at the interpretive center. The Mammoth Nature Trail is 0.7 miles long, the Dry Lake Trail is 1.8 miles long and the Circle Trail is 4.5 miles long. During the winter the CMSRA’s trails are open to snowshoeing, hiking and cross-country skiing, although the trails are not groomed.

This plan proposes nine miles of additional trails, two miles of new loop trail south of South Shattuck Lake with a trailhead at Eagle Lane and seven miles in the Hodge Lake area. The proposed additional trails traverse the rolling topography of the CMSRA, skirting lakes and wetlands, allowing visitors to experience nature while viewing and walking among the glacial features of the property.

Management Objectives

- Provide and maintain opportunities for high-quality hiking and interpretive trails.
- Provide opportunities for trail links to the Ice Age Trail, remote campsites and the David R. Obey Interpretive Center.
- Incorporate interpretive and educational opportunities into the trail network.

Management Prescriptions

- Continue to provide approximately five to six miles of Ice Age Trail (primitive hiking trail) that showcases the distinctive geologic landforms of the Wisconsin ice age in an undeveloped, scenic forested setting.
- Develop and maintain approximately nine miles of new primitive trail [NR 44.07(3)(e)] for hiking/snowshoeing, nature-study, interpretation and education, up to seven miles in the Hodge Lake area, and a two mile loop south of South Shattuck Lake. An exception is that portion of the Hodge Lake trail serving as a carry-in access way to the Hodge Lake canoe/kayak landing shall be a lightly developed trail [NR 44.07(3)(f)]. (The purpose of this slightly more developed trail is to support the use of portage wheels for those who choose to not carry their craft).
- Provide parking and access within the state recreation area to the Ice Age Trail and other trails as shown on Map B-2B.

- Preserve the current sense of remoteness, including minimizing non-natural visual and auditory impacts, for trail users.
- Reroute or redevelop trails or trail segments as necessary to maintain the trail system in a sustainable condition.
- Primitive portage trails may be developed and maintained to provide lake-to-lake canoe route opportunities for paddlers. The property manager may determine the need for and location of portage trails.

It is also recommended that a portion of the Ice Age Trail and surrounding lands be considered for State Ice Age Trail Dedication. Once dedication criteria and methods are developed the department can apply this method to Chippewa Moraine State Recreation Area Ice Age Trail segment and surrounding lands for possible dedication.

Table 2: Existing and Proposed Trails of the CMSRA

<i>Trail Name</i>	<i>Designated Use</i>	<i>Miles (approx.)</i>	<i>Development Level Classification</i>
Ice Age Trail	Hiking/Interpretation	4.75	Primitive trail - Ice Age Trail Standard
Circle Trail	Hiking/Interpretation	4.5	Primitive trail - approx 2'wide tread, primitive or native surface
Dry Lake Trail	Hiking/Interpretation	1.8	Primitive trail - approx 2'wide tread, primitive or native surface
Mammoth Nature Trail	Hiking/Interpretation	0.7	Moderately developed trail, approx 5' wide, stable aggregate surface
	Total	10.05	Note: IAT and Circle Trail overlap for 1.7 miles
<i>Proposed Trails</i>			
<i>Trail Name</i>	<i>Designated Use</i>	<i>Miles (approx.)</i>	<i>Development Level Classification</i>
Eagle Lane Loop	Hiking/Interpretation	2.2	Primitive trail - approx 2'wide tread, primitive or native surface
Hodge Lake Trail	Hiking/Interpretation	2	Primitive trail - approx 2'wide tread, primitive or native surface
Ice Walled Lake Plain Trail	Hiking/Interpretation	1	Primitive trail - approx 2'wide tread, primitive or native surface
Eastern Connection to IAT	Hiking	0.03	Primitive trail - approx 2'wide tread, primitive or native surface
Western Connection to IAT	Hiking	0.2	Primitive trail - approx 2'wide tread, primitive or native surface
Dark Lake Trail	Hiking	0.7	Primitive trail - approx 2'wide tread, primitive or native surface
Hodge Lake Carry-In Landing Trail	Carry-In Boat Access Trail	0.5	Lightly developed trail - approx 8 feet wide, stable native surface with aggregate where needed
Connection to Glacial Lakes Trail	Hiking/Interpretation	0.7	Primitive trail - Ice Age Trail Standard
	Total	7.33	

CAMPING

Camping opportunities will be maintained and expanded on the CMSRA property. The three existing remote “outpost” campsites will continue to provide a primitive camping experience, eight additional primitive campsites are proposed for the property. Campsites will be reservable and a camping fee will apply.

Management Objective

- Provide remote hike-in/paddle-in camping in a non-motorized, scenic setting that offers opportunities for solitude.

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Management Prescriptions

- Develop eight new primitive boat-in/hike-in campsites in the locations shown on Map B-2B. Seven will be located in the Hodge Lake area and one on South Shattuck Lake.
- Maintain the three existing primitive campsites shown on Map B-2A.
- Develop and maintain these primitive campsites according to the standards in NR 44.07(5)(e)3. As such, each site will include a tent pad, a camp fire ring and box latrine.

BUILDINGS AND OTHER INFRASTRUCTURE

There are 15 DNR owned buildings on the CMSRA. Only one, the David R. Obey Ice Age Interpretive Center, is open to the public at this time. Five are buildings that remain on the recently acquired Sybaquay Girl Scout Camp parcel. These include two unit houses (north and south), a well house, a large program building and a boat house. All buildings on the Sybaquay Girl Scout Camp parcel will be removed with the exception of the two garages at the manager residence.

The other ten buildings are scattered around the property and are a collection of garages, small homes, a log cabin and two latrines. In addition to the buildings, there are around 40 tent platforms with wood roofs and screen walls that had been used to house the Girl Scout campers when the camp was functioning. Map D shows the buildings remaining on the Sybaquay tract (Hodge Lake Area). Table 3 is a list of the existing buildings on the CMSRA, the building's current use and proposed action for each.

Table 3: Buildings of the CMSRA

Building Type		
Residential Houses	Current Use	Proposed Action
Sybaquay Manager's House	Building is not in use	Remove the building
Manager's House on CTH M	Building is in use as a residence	Maintain the building as a residence
Miscellaneous Buildings		
Interpretive Center	Interpretive/Visitor 's Center and Offices	Maintain current use
Sybaquay Unit House North	Building is not in use	Remove the building
Sybaquay Unit House South	Building is not in use	Remove the building
Sybaquay Program Center	Building is not in use	Remove the building
Sybaquay Boat House	Building is not in use	Remove the building
Wash Stations (2)	Building is not in use	Remove these buildings
Well House	Building is not in use	Remove the building
Screened-In Wooden Decks (40 +)	Buildings is not in use	Remove these buildings
Southworth Cabin	Building is not in use	Retain building
Garages/Cold Storage		
2 car garage at Sybaquay Manager's House	Building provides storage for the CMSRA	Maintain the building for storage
Sybaquay Shop	Building provides storage for the CMSRA	Maintain the building for storage
Garage at Manager's House	Building provides storage for the CMSRA	Maintain the building for storage

WATER ACCESS

Two auto-accessible boat launches are located on the property, on North Shattuck Lake and South Shattuck Lake. Motorized boats may be launched from these landings. An additional developed carry-in boat launch and a small open shoreline area are proposed to be added on the south shore of Hodge Lake, in the same general area as the Girl Scout camp's waterfront area. See Map B-2B for the locations. Also paddlers may access many of the small scattered lakes on the property by carrying-in from undesignated sites off of town roads.



Management Objective

- Provide waterbody-appropriate watercraft access to the CMSRA lakes for fishing, paddling and boating.

Management Prescriptions

- Maintain lightly developed auto accessible boat launches on North and South Shattuck Lakes providing access for motorized boats and paddle craft. Provide parking for approximately four vehicles.
- Develop and maintain a carry-in launch on Hodge Lake for non-motorized watercraft and designate Hodge Lake as a non-motorized lake. (This management area is designated as a non-motorized area, so launching motorized watercraft onto Hodge Lake is not allowed.) Provide walk-in lake access to the landing via a lightly developed trail from the parking lot. This access-way is to be constructed and maintained to allow access by persons using canoe/kayak portage wheels. (This access-way also serves as a portion of the Hodge Lake hiking trail system.)
- Primitive portage trails may be developed and maintained to provide lake-to-lake canoe route opportunities for paddlers. The property manager may determine the need for and location of portage trails.
- Maintain a small open area near the boat landings on North and South Shattuck Lake to provide shoreline access for fishing and other activities.

HUNTING

Management Objective

- Provide hunting opportunities, particularly for deer, turkey, small game and waterfowl. Provide opportunities for furbearer trapping.

Management Prescriptions

- The Chippewa Moraine is open for all established hunting and trapping seasons. Campgrounds, trail corridors and other public use areas may be closed to hunting and trapping by posted notice [NR 45.09(1)].

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- Many actions prescribed and detailed in other sections of this master plan support the hunting objective. A wide variety of game habitat is provided on the property through the actions outlined in the resource management section of this plan.
- Access is a significant component of providing hunter/trapper opportunities. Abundant hunting and trapping access is afforded by public vehicle access roads and parking lots, which are detailed in the road management plan found in the Road Management and Vehicle Access Plan section of this master plan. Further hunter foot access ways are provided on the property's designated trails and management roads. Two formal watercraft access sites and numerous informal (carry-in launches) are provided to allow hunter/trapper access to the property's many lakes.

FISHING

Management Objective

Support and provide opportunities for year-round fishing.

Management Prescriptions

- Provide boat launches at North and South Shattuck Lake and a carry-in launch at Hodge Lake.

Note: See the "water access" section of this plan for additional details related to fishing access.

ROAD MANAGEMENT AND VEHICLE ACCESS PLAN

The CMSRA has a network of primitive, lightly and moderately developed roads that are used for management purposes and public access. Roads that are open for general public vehicle access lead to parking lots or boat access sites. Management roads closed to public vehicles are gated or signed.

All department maintained roads that are not open to public vehicles will be maintained as primitive or lightly developed roads [NR 44.07(3)]. On primitive roads, which are seasonal and not regularly maintained, ruts and downed trees may be present. Maintenance is done on primitive roads as needed. Public access roads managed by the department shall be constructed and maintained as either lightly developed or moderately developed roads. The property manager may determine which of these road standards to apply on a case by case basis.

Management and public access roads provide access for such activities as managing timber, improving fish and wildlife habitat, fighting fires, and recreation. Access to and within the Chippewa Moraine is on a variety of road types, including state and county highways, town roads and DNR managed roads. Roads managed by other units of government, such as town, county or state highways, are outside the scope of this master plan.

Approximately 1.2 miles of DNR managed roads are open to public vehicles. There are also 2.9 miles of roads that are closed to public vehicles and used for management access. These roads vary in development and maintenance standards including a lightly to primitive level of development. These roads also provide foot access for hunters and hikers. Map B-2C shows the current property road network both those that are open to public vehicles and those closed, Map B-2D shows the proposed road network.

There are 12 parking lots on the property, eight of the 12 lots are small, mowed areas located just off the road with room for two to six parked cars. Slightly larger and more developed lots are available at South Shattuck Lake and North Shattuck Lake. A small gravel lot is located off of Breezy Point Road at the Hodge Lake area (the old girl scout camp) and a large 50 car paved lot is located at the visitors center.

Classifications of CMSRA Roads Defined

The roads managed by the department on the CMSRA fall into three different development level classifications. The classifications reflect a range of development and maintenance standards. Roads within the CMSRA will be maintained as primitive, lightly developed, or moderately developed.

These road classifications are defined by NR44.07(3) and are as follows:

Primitive road: A primitive road shall be a temporary road, a permanent seasonal road or a permanent all-season road which is primarily a single lane with a maximum sustained cleared width normally not exceeding 12 feet, it has no or little grading, with limited cut and fill, is surfaced with primitive or native materials and has a maximum speed design of 15 mph. Due to the variability of roadbed conditions at different times and places, some primitive roads might not be negotiable by ordinary highway vehicles.

Lightly developed road: A lightly developed road shall be a temporary road, a permanent seasonal road or a permanent all-season road which is primarily a single lane with a maximum sustained cleared width normally not exceeding 16 feet, is lightly to well-graded with minimal cut and fill, is surfaced with primitive, native or aggregate materials except in limited special use situations where asphalt may be used, and has a maximum speed design of 15 mph. Due to the variability of roadbed conditions at different times and places, some lightly developed roads might not be negotiable by ordinary highway vehicles.

Moderately developed road: A moderately developed road shall be a permanent seasonal road or a permanent all-season road which typically is 2-lane, but may be one-lane, have a maximum sustained cleared width normally not exceeding 45 feet for 2-lane and 30 feet for one-lane, a well-graded roadbed and may have moderate cuts and fills and shallow ditching, has a surface of aggregate, asphalt or native material, and a maximum design speed of 25 mph.

Management Objectives

- Provide a network of roads and parking lots on the CMSRA that meet land management and recreational access objectives, while minimizing environmental impacts and management costs.
- Maintain property roads to the designated road standards and in a sustainable condition.

Management Prescriptions

The following management prescriptions apply to department managed roads:

- Maintain the public access roads and closed management roads as shown on Map B-2D.
- Abandon a segment of the existing entry road off of 145th Street and the existing parking lot.
- Provide a public access road from Breezy Point Lane to a new parking lot/trail head to serve the new trails and remote campsites at Hodge Lake. The parking area will be located about 1,200 feet from the existing parking lot, see Map B-2C.
- Maintain permanent roads in a sustainable condition and at their designated development level.
- Assure roads meet Wisconsin Forestry's Best Management Practices for Water Quality standards.
- Regularly inspect active roads, especially after heavy storm events. Clear debris as needed from the road surfaces, culverts and ditches to decrease unsafe conditions and prevent damage.

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- Maintain stable road surfaces to facilitate proper drainage and reduce degradation from traffic during wet or soft conditions; or close the road when these conditions exist.
- Monitor soil disturbance and take measures to prevent excessive damage.
- Restore roads used in timber harvests to non-erosive conditions, in accordance with Wisconsin Forestry's Best Management Practices for Water Quality.
- Establish appropriate speed limits for public access roads based on the road's development classification and the type and level of use.

V. RESOURCE MANAGEMENT AND PROTECTION

This section of the plan outlines resource management objectives and management actions. The property is subdivided into management areas based on unique habitat or natural community characteristics or values, or management purpose. Each management area has its own set of management objectives and prescribed management actions to achieve those objectives.

A. RECREATION MANAGEMENT AREA, TYPE 2, RECREATION MANAGEMENT AREA, TYPE 3 RECREATION MANAGEMENT AREA AND TYPE 3 NON-MOTORIZED RECREATION MANAGEMENT AREA

There are four Recreation Management Area units on the CMSRA. These areas receive dispersed recreational use such as trails and remote campsites and are classified as either Type 2, Type 3 or Type 3 Non-Motorized. The following resource management section applies to all of these management classifications.

One intensive use area, the Interpretive Center and its grounds, is classified as a Type 4 Setting. The resource management for this site is discussed in its respective management area write-up.

Note: The boat launches on North and South Shattuck Lakes are Type 3 Recreation Management Areas and allow motorized use.

Combined, the Recreation Type 2, Type 3 and Type 3 Non-Motorized Management Areas encompass over 2,365 acres, or about 60% percent of the property. They are comprised of a wide variety of habitat types ranging from upland and lowland forests, lakes, wetlands and grasslands. The Recreation Management Area Type 3 Non-Motorized Setting [NR 44.07(6)(h)] contains a part of the Chippewa Moraine Lakes State Natural Area (Plummer Lake). See Map B-5A.

The following resource management objectives and prescriptions apply across all blocks of the Type-2 and Type-3 Recreational Use Setting sub-class zones.

Management Overview: Provide a large, natural appearing, scenic area of lakes, wetlands and forests with "old forest" characteristics supporting low-impact recreation and providing critical habitat for wildlife, including a number of rare birds, requiring larger blocks of older forests habitat. Note that Recreation Management Area, Type 3 Non-Motorized does not allow motorized recreation including motor boats.

Long-term Resource Management Objective (50 yr +):

- Provide an attractive, natural appearing forest with old growth characteristics such as larger diameter trees and large blocks of closed canopy conditions that provides habitat for species requiring older forests.
- Protect lakes and wetlands including ephemeral ponds.
- Support interpretation and viewing of important geological features by maintaining select sites in grassland cover.

Short-term Resource Management Objectives (0 - 50 yr):

- Protect and enhance the natural, scenic character of the area.
- Maintain and expand the acreage of oak dominated stands and larger blocks of closed canopy forest conditions. On appropriate sites, increase the presence of larger, older trees and old growth forest community characteristics.
- Protect and maintain the area's high quality wetlands, ephemeral ponds and lakes.
- Maintain geological sites shown on Map B-5B in grassland to facilitate viewing and interpretation.

Resource Management Prescriptions:

Forest Management:

- To the extent reasonably practical, time and carry out vegetation and other significant management activities in a manner that preserves the aesthetic quality (scenic and auditory) and the overall quality of the visitor's recreational experience.
- Conduct uneven-aged selection and patch selection (0.25-1.0 ac in size) harvests to maintain and expand oak and promote larger trees with closed canopy conditions. Maintain at least 70% canopy cover and 70% pre-cut basal area during any harvests that may occur. Retain snags and dead/downed trees for wildlife habitat, with the exception of hazard trees near designated public use facilities.
- Oak seedlings and regeneration may be released primarily through the use of prescribed fire where possible. When burning is not practical, mowing or herbicides may be used for oak release.
- Red maple and other northern hardwoods may be thinned to maintain and promote oak dominance and regeneration.
- Follow all relevant aesthetic guidelines, best management practices, and terrain restrictions when conducting timber management.
- For timber management in stands with ephemeral ponds, incorporate buffers and maintain long-lived tree species around ponds. Leave connecting strips to ponds for amphibian travel corridors where possible. Map ephemeral ponds prior to establishing a timber sale.
- Residual tree tops and limbs left after a harvest activity (slash) shall be removed, chipped or lopped and scattered to within 24 inches above the ground within 100 feet of a designated recreation trail or public road. Where the effective visibility from the road or trail exceeds 100 feet, slash shall be treated within the zone, up to 200 feet from the road or trail. (See NR44.07(5)(g)(management parameters).)
- Primarily use tree planting to convert old fields, agricultural fields, upland clearings, and stands dominated by shorter-lived tree species, such as aspen to oak and other long-lived forest cover types. If advanced regeneration is already present, allow natural succession to occur.
- To maintain or restore scenic values, conduct salvage harvests and take other actions as necessary to restore sites following natural disturbances. All actions must be consistent with the area's land use classification and the management objectives.
- To the extent practicable, actively discourage the use of and visually camouflage all old, non-designated roads and trails. Allow them to naturally revegetate.
- Trees and shrubs may be removed or pruned as needed for the development or redevelopment of trails and other designated public use areas or sites.

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- Planting and maintenance of native trees, and shrubs may be done on and near designated trails and public use areas for screening, scenic enhancement, wildlife enhancement or to enhance recreational use of the site.
- Follow the management parameters in NR 44.07(5)(g) when conducting management activities in the Type 2 Setting Area and NR 44.07(6)(g) when conducting management activities in the Type 3 Setting Area.

Grassland Management:

- Use prescribed burning, mowing or brush cutting to maintain grassland cover on the geological viewing/interpretation sites shown on Map B-5B.

Authorized resource management activities:

The following management tools may also be employed to accomplish the prescriptions listed above:

- Commercial timber harvest,
- Non-commercial timber stand improvement practices,
- Cutting individual hazard trees along designated trails or use areas,
- Limited earth work to construct and maintain trails,
- Earth work and/or planting native species to restore abandoned roads and trails and prevent erosion,
- Manual, mechanical, biological, and chemical methods may be used to control invasive species and forest pests.

The Value of Larger Blocks of Habitat

Gone are the extensive prairies, savannas, wetland, and larger patches of forest that dotted this landscape prior to European settlement. Today, all types of remaining native habitats, but especially grasslands/prairies and upland forests, are severely fragmented, having been broken in to small patches by agriculture, highways, urban and rural development. Many grassland wildlife, especially birds, require a minimum of 40 acres of contiguous habitat, while blocks of 80-250 acres are more preferable. Similarly, larger blocks of forested habitat provide higher quality habitat for interior-forest bird species. In addition to the wildlife habitat benefits associated with large blocks of habitat, the ease and efficiency of management increases as patch size increases. In general, the wildlife benefits of a particular habitat type increase as patch size increases.

Invasive Species Control

The threat of exotic and/or invasive species, including plants, animals, insects and diseases represent a significant and growing threat to our native plant and animal communities. The CMSRA has not been significantly affected by many of the ecologically invasive plants that are serious concerns in other parts of the

state. Infestations of Canada thistle, Dame's rocket, garlic mustard, hemp nettle, spotted knapweed, common buckthorn, and Eurasian honeysuckle have been documented on the CMSRA. Other common wetland invasives noted to occur within the vicinity of the CMSRA include purple loosestrife, narrow-leaf & hybrid cattails, and reed canary grass. Aquatic invasive species noted to occur within the vicinity of the CMSRA include curly-leaf pondweed, eurasian water-milfoil, banded mystery snail, Chinese mystery snail, rusty crayfish, and zebra mussel.

The potential for invasive plant species to spread on the CMSRA is very likely given the trail network that exists on the property. Trails, access points for fishing, and other high-use areas are typical entry points for invasive species that are introduced by visitors' footwear, clothing, vehicle tires, boats and other recreational equipment. Once established these invasive species may continue to spread along natural corridors (e.g., streams) and along recreational corridors (e.g., hiking trails). Invasive species may also be spread inadvertently through management activities such as timber operations, especially if best management practices (BMPs) are not followed.

Given that a number of non-native species are not yet present or widespread on the CMSRA; early detection and rapid response to new and/or small infestations represent high-impact conservation actions.

Invasive plants may be controlled using appropriate and effective methods, including but not limited to the use of bio-control, herbicides, cutting, hand removal, fire or bio-control. Control methods may be restricted in certain sensitive management areas.

Production of Forest Products

The production of forest products is not a specific management purpose for the CMSRA; however, it is an important secondary benefit of management. Timber harvesting is an essential tool for managing many CMSRA habitats and native communities. Forest management objectives and prescriptions are an integral part of the management outlined in the pages below. All forest management complies with Forest Certification standards for sustainability.

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B. NATIVE COMMUNITY MANAGEMENT AREA

There is one Native Community Management Area in two units on the CMSRA, totaling 1,432 acres. Two State Natural Areas are located within the native community management areas as well.

Native community management areas are managed with the primary objective of representing, restoring and perpetuating native plant and animal communities, whether upland, wetland, or aquatic and other aspects of native biological diversity. Areas that do not have the desired community conditions but have a reasonable potential to be restored to those conditions are included in the native community classification.

Management activities are designed to achieve land management objectives through natural processes or management techniques that mimic natural processes when possible. However, management activities are not restricted; a master plan may authorize any management activity or technique, including passive management that is consistent with the management objective specified in the master plan for the area, and is compatible with the site's ecological capability. Examples of potential management activities include timber harvesting, mowing, burning, planting, herbicide application, road construction and erosion control.

Native community management areas also provide opportunities for low-impact public uses such as hunting, hiking, bird-watching, photography and nature study. Opportunities are also available for research, ecological interpretation and education.

Management Overview: Provide an attractive, natural appearing forested setting featuring forest dominated with larger diameter trees, lakes and wetlands for opportunities for high quality, lower intensity, non-motorized recreational uses. A high concentration of ephemeral ponds and other wetlands also occur in the area.

Table 4: Native Community Management Area

Native Community Management Area	Acreage
North of North Shattuck Lake Unit	671
Town Line Lake and Woods Unit	761

North of North Shattuck Lake Unit

The North of North Shattuck Lake native community management area encompasses a variety of upland and lowland natural community types. The management area includes high quality mature southern dry-mesic forest that is dominated by large red and white oaks. Other significant high quality natural communities include wetlands like poor fens and ephemeral ponds. Various other forested and non-forested wetlands occur within the management area. With its landscape position near the Tension Zone, both northern and southern elements of Wisconsin's flora and fauna, especially forest interior birds, are found here. This management area is also an important site for migrating birds, which use the area heavily during spring migration. A number of rare animal and plant species have been documented here. The North of North Shattuck Lake State Natural Area currently

covers roughly half of this management area. There are also several named lakes (including Dark Lake) and unnamed lakes within the management area. Geologic features, such as ice walled lake plains, are well-represented in this management area.

The larger block of older southern dry-mesic forest provides important habitat for species such as forest interior birds. The juxtaposition of the uplands and wetlands also meet the habitat requirements for many other animals. The abundance and distribution of ephemeral ponds are important habitat for many amphibians and invertebrate species.

Town Line Lake and Woods Unit

The end moraine landscape within the Town Line Lake and Woods native community management area is mostly forested, very uneven topography with numerous depressions supporting lakes, ponds, wetlands and streams. The western part of the complex tends to be somewhat more gently rolling than the eastern part. Especially noticeable in the eastern part of the complex are numerous 30 to 60 foot high, steep sided ridges and hills. Town Line Lake and Woods management area features a large, second-growth block of medium aged to older southern dry-mesic forest in an area of rough morainal topography dotted with kettle lakes and wetlands. Dominant trees include red and white oak, red maple and big-tooth aspen. In addition to upland forest, this management area supports good quality wetlands including sedge meadow, bogs and ephemeral ponds. With its landscape position near the Tension Zone, both northern and southern elements of Wisconsin's flora and fauna, especially birds, are found here. This management area is also an important site for migratory birds, which use the area heavily during spring migration. A number of rare animal and plant species have been documented here. Small lakes are scattered throughout the site. Geologic features, such as ice walled lake plains, are well-represented in this management area. Town Line Lake and Woods State Natural Area is located in the management area.

The larger block of older southern dry-mesic forest provides important habitat for species such as forest interior birds. The juxtaposition of the uplands and wetlands also meet the habitat requirements for many other animals. The abundance and distribution of ephemeral ponds are important habitat for many amphibians and invertebrate species.

The following management objectives and prescriptions apply to both units of the Native Community Management Area.

Long Term Management Objectives (50 Years Plus)

Provide an area with little fragmentation by trails or roads and having a closed canopy forest community dominated by oak and exhibiting old-growth characteristics, such as large diameter trees and coarse woody debris, and a ground layer free of exotic or invasive species.

Provide and maintain the area as an oak-dominated forest, serving as an ecological reference area. Natural processes and prescribed understory manipulation (see below) will determine the structure of the forest.

Short Term Management Objectives (0-50 Years)

- Further develop and enhance an old-growth forest community dominated by oak working toward the long-term management objectives, with emphasis on using natural processes and management tools that mimic natural processes to obtain this objective.

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(Note: The native dominant tree species (primarily oaks) are managed passively. However, understory manipulation and shrub control via non-commercial harvest, brushing or fire may be needed to mimic natural disturbance patterns. The mostly passive canopy management and understory manipulation will determine the ecological characteristics of the site. Exceptions include control of invasive plants and animals, maintenance of existing facilities, and access to suppress fires.)

- Enhance and expand dominant cover types by converting stands dominated by shorter-lived species, such as aspen, upland brush, and grassland to stands dominated by longer-lived species such as oaks.
- Restore and maintain the core of the management area, which includes the ephemeral ponds, in an undeveloped condition and unfragmented by roads and trails. Provide limited access on primitive trails.
- Salvage of trees after a major wind event is not considered compatible with management objectives for the area.

Management Prescriptions

- Primarily use passive management, with the exception of prescribed fires, to allow the forest to reach old growth characteristics. Use prescribed fire where possible to help maintain oak and reduce northern hardwoods
- Using non-commercial timber stand improvement and other practices and tree planting as appropriate, convert aspen, upland brush, and grassland stands to oak or other long-lived tree species.
- Conduct no salvage within the area after natural disturbances other than for hazard tree management along authorized trails and other developed areas.
- Control wildfires, insect and disease threats when required by statute.
- If invasive species control is necessary, use the least intrusive, practicable means available.
- Construct and maintain limited primitive trails (as shown on Map B-2B and described in the trails section) and remove hazard trees along the trails as required.
- To the extent practicable, actively discourage the use of and visually camouflage all old, non-designated roads and trails. Allow them to naturally revegetate.

Active and Passive Management

The master plan refers to both active and passive habitat management prescriptions.

Active Management: Active management includes the direct manipulation of the plant and animal communities. Examples include seeding a parcel to re-establish grasslands, conducting prescribed burns, and harvesting timber.

Passive Management: Passive management means no or very limited, specific direct action is taken to manage a habitat, allowing natural processes to respond to conditions and dictate the habitat's or community's composition and habitat attributes. Passive management is often used in habitats with the following characteristics:

Size - management activities may be too expensive or difficult to conduct due to small size

Location – isolated or difficult to reach habitats (such as islands, wetlands or erodible hillsides)

Habitat quality - Units with good to excellent habitat may be stable thus requiring little to no intervention, or it may be an infestation (i.e., an expansive reed canary grass infestation in a disturbed wetland) of such size and complexity that the tools and/or resources required for restoration are not currently available

Authorized resource management activities:

In addition to the activities described in the prescriptions above, the following tools may also be used when and where appropriate:

- Limited earth work to construct and maintain trails and roads,
- Hand and mechanical earth work and/or planting native plants to restore abandoned roads and trails and prevent erosion,
- Grass and brush cutting/mowing,
- Mechanical, biological, and chemical methods can be used to control invasive species and forest pests.

C. STATE NATURAL AREAS

State Natural Areas (SNAs) are part of a statewide system of sites identified for the purposes of ecological research, education and to assure the full range of ecological diversity for future generations. State natural area sites contribute to rare species habitat, provide ecological reference areas, or contain significant geological or archaeological features.

Overview of State Natural Area Program

The objectives of the State Natural Area Program are to: *Locate, establish and preserve a system of SNAs that as nearly as possible represent the wealth and variety of Wisconsin's native landscape for education, research and long-term protection of Wisconsin's biological diversity for future generations.*

The State Natural Area designation does not change the underlying management objectives, prescriptions, or authorized recreation and management activities outlined in this master plan for each management area. There are no additional management prescriptions associated with these State Natural Areas.

The Wisconsin State Natural Areas Program oversees the establishment of SNAs and is advised by the Natural Areas Preservation Council.

The property includes parts or all of three designated State Natural Areas; shown on Map B-1. Management for the North of North Shattuck Lake and Town Line Lake and Woods SNAs can be found in Section 2.B. Each are described below.

North of North Shattuck Lake State Natural Area: The CMSRA includes 171 acres of a total the 297 acre North of North Shattuck Lake State Natural Area (dnr.wi.gov, keyword “state natural area”). Located within the rugged topography of a glacial end moraine, North of North Shattuck Lake SNA features a southern dry-mesic forest of red and white oaks, red maple, big tooth aspen and basswood. Other tree species include butternut, northern pin oak, white pine, red pine and black cherry. The site varies from a dense oak forest that is rapidly approaching old-growth, through patches with a light harvest a few decades ago, to patches of oak woodland found on steep south-facing slopes. Characteristic herbs are big-leaf aster, naked tick-trefoil, hog-peanut, wood anemone, wild sarsaparilla, wood thistle, round-lobed hepatica, one-flowered broomrape, round-leaf pyrola and American starflower. Small, shallow lakes and depressions are interspersed throughout the site and provide habitat for a diversity of invertebrates. This area is an important site for migratory birds, which use the area

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heavily during spring migration. Resident birds include red-headed woodpecker, hairy woodpecker, scarlet tanager, American redstart, yellow-throated vireo and eastern wood-pewee.

North of North Shattuck Lake is owned by the DNR and was designated a State Natural Area in 2010. This master plan addresses the entire North of North Shattuck Lake SNA as the acres outside of the project boundary are adjacent to the CMSRA boundary.

Town Line Lake and Woods State Natural Area (635 acres) features a large, second-growth block of medium aged, dry-mesic forest in an area of rough morainal topography dotted with kettle lakes and wetlands. Dominant trees include red oak, white oak, red maple and big-tooth aspen. The importance of the canopy species varies locally within the block and scattered large individual trees are present. Several small seepage lakes and kettle wetlands are also present including poor fen, Northern Tamarack Swamp and emergent marsh. Small, scattered patches of wet-mesic white pine-yellow birch-black spruce forest are found within the area. Town Line Lake is a 48 acre soft-water seepage lake with an intermittent outlet to the O'Neil Creek drainage system. Breeding birds include common loon, red-shouldered hawk, red-headed woodpecker, least flycatcher, winter wren, veery, wood thrush, blue-winged warbler, golden-winged warbler, ovenbird and cerulean warbler. Fish include northern pike, largemouth bass and slow-growing panfish.

Town Line Lake and Woods is owned by the DNR. It was designated a State Natural Area in 2010. This master plan addresses the management of Town Line Lake and Woods SNA as it is entirely contained within the CMSRA.

Chippewa Moraine Lakes State Natural Area (306 acres) features a dense concentration of nine lakes in a relatively natural state, situated within the morainal topography of Chippewa County just west of the Chippewa River. Lakes include Camp, Spence, Plummer, Little Plummer, Bass No. 1, Bass No. 5, Deer, Fishpole and Burnt Wagon. Each lake exhibits differences in plant species composition and population densities due to depth, alkalinity and shore features. Only Plummer Lake is within the Chippewa Moraine State Recreation Area. Plummer Lake is a 41-acre deep hard-water seepage lake with a small outlet stream to Mud Brook. Wood ducks nest here.

Chippewa Moraine Lakes is owned by Chippewa County and DNR (Plummer Lake). The site was designated a State Natural Area in 2010. This master plan will only address the Plummer Lake section of this SNA as it is the only section owned and managed by the DNR.

Table 5: State Natural Areas of the CMSRA

SNA Name	County	Current Acres	Proposed Change_ Acres	Proposed Total Acres	Year Established
North of North Shattuck Lake	Chippewa	297	309	606	2010
Town Line Lake and Woods	Chippewa	635	64	699	2010
Chippewa Moraine Lakes_ Plummer Lake *	Chippewa	41	0	41	2010
Totals		973	373	1346	

*** All of the 11 lakes in the Chippewa Moraine Lakes SNA are on Chippewa County forest land. Only Plummer Lake is in the CMSRA.**

D. FISHERY MANAGEMENT

Hodge Lake

Hodge Lake provides a quality panfish fishery. When surveyed in 2013, 59% of the bluegill captured were eight inches or larger. Prior to DNR acquisition of the property surrounding Hodge Lake, there was no public access which helps explain the great size structure observed in the bluegill population. Due to the quality bluegill fishery and small size of Hodge Lake, a 10 fish panfish bag limit was implemented on Hodge Lake in 2016 to protect this unique resource. Largemouth bass, black crappie and yellow perch were also captured in the fishery survey.

Management Objectives

- Provide and maintain a quality panfish fishery with a special focus on bluegill.

Management Prescriptions

- Conduct fishery surveys on a periodic basis (8-12 years) to evaluate the status of the fishery and determine if any management action should be taken.

North Shattuck Lake, South Shattuck Lake, Town Line Lake and Plummer Lake

Management Objectives

- Maintain a sustainable fishery as is practicable given the fisheries habitat limitations.

These lakes and their specific management prescriptions are discussed below.

North Shattuck Lake

North Shattuck Lake primarily provides a largemouth bass and bluegill fishery. Other species that occur in the lake are northern pike, yellow perch and black crappie. Infrequent winterkills limit the potential of the lake's fishery.

Management Prescriptions

- Annually take dissolved oxygen measurements in late winter to determine the frequency of potential winterkills in the lake.
- Conduct fisheries surveys on periodic basis (8-12 years) to evaluate the status of the fishery and determine if any management action is warranted.

South Shattuck Lake

South Shattuck Lake winterkills on a more frequent basis than North Shattuck Lake and the fishery is substantially limited because of this occurrence. The winterkills can be minor where only a small portion of the fish die or severe where the whole fish community succumbs. Species that are found in South Shattuck Lake are largemouth bass, bluegill, yellow perch, black crappie and northern pike. The size and age of the fish that are found in South Shattuck Lake is truncated due to frequent winterkills. A surface aeration system would reduce and likely eliminate any winterkill occurrences on South Shattuck Lake and the fishery would respond positively. However, there are drawbacks to an aeration system such as continual maintenance, noise and electrical costs.

Management Prescriptions

- A surface aeration system would reduce and most likely eliminate winterkill occurrences. The fishery would respond positively and it would create a resource that would be more attractive for users of CMSRA. If there is local support and funding for an aeration system, then installing an aeration system should be considered at that time.
- Conduct fisheries surveys on periodic basis (8-12 years) to evaluate the status of the fishery and determine if any management action is warranted.

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Town Line Lake, and Plummer Lake

These lakes winterkill on an infrequent basis. If winterkill occurs on these lakes in a greater than a 10 year timespan, there is the opportunity for a quality fishery to occur. If a complete winterkill occurs, stocking is a management option to help the fishery recover at a quicker pace. If stocking is chosen to rehabilitate the fishery, yellow perch are a good option because they can tolerate low dissolved oxygen levels and grow quickly with the absences of predation and competition from other fish species.

Management Prescriptions

- If a complete winterkill occurs, if practicable, use stocking to help the fishery recover more quickly. If stocking is chosen to rehabilitate the fishery, yellow perch are a good option because they can tolerate low dissolved oxygen levels and grow quickly with the absences of predation and competition from other fish species.

NOTE: FISHERY REGULATIONS ARE OUTSIDE OF THE PROPERTY MASTER PLAN AND PLANNING PROCESS. WHILE FISHERY MANAGEMENT OBJECTIVES MAY BE ESTABLISHED THROUGH THE MASTER PLANNING PROCESS, ANY FISHERY REGULATIONS THAT ARE USED TO HELP MEET THE OBJECTIVES ARE ESTABLISHED THROUGH A SEPARATE ADMINISTRATIVE CODE PROCESS.

VI. ADMINISTRATION MANAGEMENT POLICIES AND PROVISIONS

The following section describes the general property administration and management policies and provisions that apply to the CMSRA.

RESEARCH

Research projects that support or are consistent with the CMSRA goals, objectives, or management prescriptions may be authorized and conducted on the CMSRA.

FACILITY MANAGEMENT AUTHORITY

The CMSRA manager may relocate or temporarily close road and trail segments or other public use facilities; as deemed necessary to meet management objectives after appropriate authorization through normal department approval processes.

CULTURAL RESOURCE PROTECTION

All requirements for the protection of archeological sites and historic structures will be complied with. Federal Section 106 (commonly called SHPO) and state cultural resources law (s. 44.40) requires review of actions that may impact significant (eligible for listing in the National Register of Historic Places) cultural resources regardless of whether there are any recorded in the area. Surveys to search for unreported sites may be required.

PUBLIC HEALTH AND SAFETY

All facilities will comply with federal, state and local health and sanitation codes. The CMSRA manager has the authority to close areas or facilities to access if necessary due to health, safety, or environmental damage concerns. In designated public use areas, such as designated parking lots and designated trails, trees or other natural elements that are deemed public hazards will be removed.

REFUSE MANAGEMENT

Visitors are required to carry out any refuse they bring in because no designated refuse or recycling receptacles are available. Burying of refuse is not allowed anywhere on the property.

DISABLED ACCESSIBILITY

All new construction and renovation of infrastructure will follow guidelines set forth within the Americans with Disabilities Act. Following standard department protocol, the CMSRA manager has the authority to make reasonable accommodations, including motorized vehicle access, for people with disabilities.

FUNDING CONSTRAINTS

Implementation of the master plan is dependent upon staffing and funding allocations that are set by a process outside of the master plan. Operational funding for the department is established by the state legislature. Development projects also follow an administrative funding and approval process outside of the master plan. Many of the initiatives contained within the plan are dependent upon additional funding and staffing support. Therefore, a number of legislative and administrative processes outside of the master plan will determine the rate this master plan will be implemented.

ENDANGERED, THREATENED AND SPECIES OF SPECIAL CONCERN PROTECTION

Implementation of all management prescriptions in the master plan will be carried out with consideration of the needs of endangered, threatened, and species of special concern and the potential impacts to the species and their habitat. Management actions planned during plan implementation will be checked against a database of listed species to assure that no department actions result in the direct taking of any known endangered or threatened resource.



BEST MANAGEMENT PRACTICES FOR WATER QUALITY

All forest management activities will comply with the most recent version of the guidelines in the Wisconsin Forestry's Best Management Practices for Water Quality (BMPs).

PEST CONTROL

Wisconsin Statute 26.30 states; "It is the public policy of the state to control forest pests on or threatening forests of the state..." Any significant forest pest events will be evaluated with consideration given to the property management goals and the potential threat of the pest to other landowners. Infestations of the non-native gypsy moth caterpillar will be managed according to the Forest's Gypsy Moth Management Plan. Responses to significant infestations from other forest pests may include timber salvage or pesticide treatments. Any response to a significant pest outbreak will be evaluated by an interdisciplinary team of scientists and communicated through press releases and notices to interested parties.

CONTROL OF INVASIVE SPECIES

Invasive plants will be regularly monitored and controlled using appropriate and effective methods, including but not limited to the use of bio-control, herbicides, cutting, hand removal, or fire. Control methods may be restricted in certain sensitive management areas.

TEMPORARY SANITARY FACILITIES

The property manager may install portable (temporary) sanitary facilities at any sites when they determine there is a need.

FOREST CERTIFICATION

Since 2009 Wisconsin State Forests and all other DNR managed lands have had dual, independent third-party forest certification from the Forest Stewardship Council (FSC) and the Sustainable Forestry Initiative (SFI). Independent, third-party certification means management of Wisconsin's forests meets strict standards for ecological, social, and economic sustainability. The status of any certification corrective actions will be shared annually.

CHEMICAL USE

Herbicides and pesticides may be used for various purposes such as the control of invasive plants or to control plant competition in vegetation regeneration areas and insect control except as restricted in the management prescriptions in this master plan. All department procedures and herbicide and pesticides label requirements will be followed.

FIRE SUPPRESSION

As stated in Wisconsin Statutes 26.11, "The department is vested with power, authority and jurisdiction in all matters relating to the prevention, detection and suppression of forest fires outside the limits of incorporated villages and cities in the state except as provided in sub (2), and to do all things necessary in the exercise of such power, authority and jurisdiction." Forest fire suppression actions will consider the property management goals and the threats of the fire to life and property. Appropriate techniques will be used in each event to provide effective fire suppression while minimizing resource damage.

AUTHORIZED RESPONSE TO CATASTROPHIC EVENTS

Wildfires, timber diseases and insect infestations are natural occurrences but shall be controlled to the degree appropriate to protect the values of the property. Necessary emergency actions may be taken to protect public health and safety. Appropriate management responses to catastrophic events are determined on a case-by-case basis, and action will be taken as appropriate.

NON-METALLIC MINING

The department may use sand, gravel, fill dirt, or other fill material from department-owned lands for department use.

GENERAL REAL ESTATE MANAGEMENT

Acquisition Policies

It is the policy of the Natural Resources Board and the DNR to acquire lands from willing sellers only. As required by state and federal laws, the department pays just compensation for property, which is the estimated market value based on an appraisal. At times, it is in the interest of the department and the landowner for the department to acquire only part of the rights to a property, or an easement. The department has a number of easement options available to address these situations.

Aides in Lieu of Taxes

For all State properties purchased after 1992, the department makes an annual payment in lieu of property taxes to replace property taxes that would have been paid if the property had remained in private ownership. More detailed information on how the department pays property taxes may be found in a publication titled, Public Land Property Taxes, PUB-LF-001.

Easements, Access Permits and Land Use Agreements

Easements, access permits, land use agreements, and leases provide access across state property for utilities, public roads, snowmobile trails, or other public-benefit infrastructure, access to private ownership within a property boundary, and provide for a variety of temporary uses on a department property. Such arrangements require consultation and joint action by the affected program and the Bureau of Facilities and Lands, Real Estate Program staff. While such situations may serve a public purpose (e.g., a utility corridor or a road) they may adversely affect a management unit by:

- Restricting the department's future management options;
- Limiting the public's full use and enjoyment of a property;
- Preventing natural succession of cover types;
- Introducing exotic and invasive species to the property;
- Introducing additional herbicides and other contaminants to the property; and
- Creating liability concerns.

The conveyance of easements and other agreements is subject to sections NR 1.48 and NR 1.485, Wis. Adm. Code. Before any rights are conveyed, the Bureau of Facilities and Lands Real Estate staff must determine if federal funds were used to acquire the land and, if so, obtain the appropriate approvals.

PUBLIC COMMUNICATIONS PLAN

The public and other governments will be provided opportunities to have on-going involvement in the implementation of this master plan. This communication plan describes how the public will be periodically informed about activities and developing issues on the CMSRA and it provides information on how the public will be notified of opportunities for involvement when significant, new issues related to management of the property arise. Annually the department will issue a monitoring report that summarizes the following items.

- For the past year, the primary management and development activities that were completed and other significant issues that were addressed.
- For the up-coming year, outline any planned management and development activities and any changing management actions or approaches.

The annual report may also include other information of interest to the public on various topics related to management and use of the properties. Some of the additional types of information that may be included from time to time are: the status of forest insect or disease problems, storm damage, new information on endangered or threatened species, recreational management problems or new opportunities, and any significant recreational use changes or trends on the property. The annual report will be available on the DNR internet web site.

In the event the department considers a change to the master plan (via a plan variance or amendment) the public will be informed of the proposal and the review and comment process. As appropriate, news releases will be used to announce master plan amendment/variance proposals and review procedures. The department will also maintain a contact list of persons, groups and governments who have requested to be notified of potential plan changes.

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CMSRA FACILITY DEVELOPMENT, IMPROVEMENTS AND CONSTRUCTION

The timing of development will depend upon the availability of funding and the approval of the improvement projects as part of the DNR's Capital Development Process. It is estimated that the total cost of all planned improvements will be approximately \$228,000 (in 2017 dollars) as shown in Table 6.

Table 6: Estimated Development Costs in 2017 Dollars

Item	Description	Costs
Building Removal	Remove the North and South Unit, the Program Center, Well House and the Dark Lake Boat House	\$47,540
Shelter for Behind the Interp Center	80 person capacity, partially enclosed shelter with fireplace	\$52,400
Camping	Remote primitive camping - 8 hike or paddle-in sites with box latrines	\$10,680
Entrance Road, Parking Lot, Trailhead	0.5 mile gravel entrance road, 15 parking stalls, kiosk, gates, etc	\$55,975
Lightly Developed Trail (Trail to Hodge Lake Landing)	6' tread, approx. 0.5 mile long	\$5,544
Primitive Trail Development (All Other New Trails on Property)	2 foot tread, approx. 9 miles in length and 500 feet of boundary fence	\$16,110
Carry-In Launches	Improve existing launch on Hodge Lake and add one on South Shattuck Lake	\$1,500
Total		\$189,749
20% for contingency and inflation		\$37,950
Grand Total		\$227,698.80

DNR CONTACT

The following department staff may be contacted regarding questions about the CMSRA or the master plan. At the time of this publication, the contact information is:

Dave Hladilek dave.hladilek@wisconsin.gov Phone: 715-382-4574

VII. PROJECT BOUNDARY ADJUSTMENTS

Current Project Boundary: 5,404 acres

New Project Boundary: 5,530 acres

Current Approved Acquisition Goal: 4,587 acres

New Acquisition Goal: 4,587 acres

Acres owned (2017): 3,804 acres

- Fee: 3,568 acres
- Easements: 236 acres

The master plan proposes one boundary adjustments. The proposed adjustments is described below and shown on Map B-6.

Proposed Boundary contractions: No boundary contractions are proposed.

Proposed Boundary expansions:

- *Inclusions of managed lands in state ownership:* The property boundary is proposed to be expanded to include an adjacent parcel that is in state ownership and under DNR management (126 acres). This

parcel (part of North of North Shattuck Lake State Natural Area) provides important habitat value and investments in vegetation management have been made.

Table 7: Summary of Real Estate Actions

	DNR owned land	Privately owned land	Total
Contractions	0 acres	0 acres	0 acres
Expansions	+ 126 acres	0 acres	+ 126 acres
Map Digitizing Error Corrections	0 acres	0 acres	0 acres
		Net boundary change:	+ 126 acres

CHAPTER THREE: PROPERTY OVERVIEW

The following section provides an overview of the Chippewa Moraine State Recreation Area (CMSRA) property and its resources, recreational opportunities and facilities. An extensive review of the CMSRA's regional context, natural resources and recreational resources, management history and current management opportunities and challenges may be found in the DNR's publication; Regional and Property Analysis, Chippewa Moraine State Recreation Area (Wisconsin Department of Natural Resources, 2016).

I. OVERVIEW AND BACKGROUND

The 3,568 acre Chippewa Moraine State Recreation Area was designated as a state recreation area in 1990. The property is largely forested and dotted with kettle lakes and wetlands. The CMSRA is managed for the protection, preservation and interpretation of the nationally significant geologic features which are evidence of the Wisconsinian stage of the continental glaciation, such as ice-walled lake plains, kettles and hummocky terrain. Outdoor recreation opportunities on the property include studying Wisconsin's natural history at the interpretive center, hunting, fishing, hiking, camping, sightseeing and wildlife viewing. See Map A for its location and regional context.



The CMSRA is part of the larger 4,400 acre Chippewa Moraine Unit of the Ice Age National Scientific Reserve (IANSR). See Map C for the locations all nine Ice Age National Scientific

Reserve units. The Chippewa Moraine Unit of the IANSR includes both the DNR owned and managed acres plus acres owned and managed by Chippewa County within the project boundary. The Ice Age National Scenic Trail passes through the Chippewa Moraine Unit using both DNR lands and Chippewa County Forest lands. This master plan does not address lands that are not owned and managed by the DNR.

As are most DNR managed properties, the CMSRA's lands are open for traditional outdoor uses including hunting, fishing, hiking, nature study and berry picking. Other compatible recreational uses may be allowed by the property's master plan if those uses do not detract from the primary purpose of the property.

SOCIAL CONTEXT

The CMSRA is a popular destination for hunting, fishing, hiking and outdoor education. It is located in north central Chippewa County, 22 miles north of Chippewa Falls and 18 miles west of Cornell, WI. The cities of Cornell and Chippewa Falls have expressed a desire is to be a recreational hub with bed and breakfasts, motels and other tourist attractions, and to serve as a front door to these extensive public lands.

The landscape in this part of northwest Wisconsin is characterized by forested tracts mixed with some agricultural fields and rural residences, both seasonal and year round homes. Lakes and wetlands dot the landscape particularly in northern Chippewa County and southern Rusk County. Chippewa Falls and Eau Claire are growing faster than the surrounding area. One hour to the west of the CMSRA is St Croix County, one of the fastest growing counties in the state. The property is centered on a population of over 3.3 million people within a 2 hour drive.

RECREATION: USE, DEMAND AND SIGNIFICANCE

Recreational use intent for the property was established by the Natural Resources Board in the 1990 master plan, to paraphrase:

- Management at the Chippewa Moraine State Recreation Area will emphasize preservation and interpretation of the glacial history of the property and Wisconsinian stage of glaciation. Provide compatible recreational and educational facilities and opportunities while maintaining and enhancing the wild character of the property. The Ice Age Trail will provide high quality foot travel experience and interpret several exceptional glacial features.

Regional Demand and Opportunities

- The CMSRA is a regional interpretive destination: The David R. Obey Ice Age Interpretive Center hosts up to 14,000 visitors annually. Twenty different school districts from a seven county area bring over 4,000 students per year to see, touch, hear and discover Wisconsin's natural and cultural history.
- Strong opportunity for growth in demand: The property's region includes the Eau Claire Metro Area, and three fast growing counties, (Eau Claire, St. Croix and Chippewa). The regional recreational demand is strong for big and small game hunting, canoeing, day hiking, wildlife viewing, fishing, motor-boating, snowmobiling, swimming in a lake or

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stream, visiting a wilderness or primitive areas, learning/visiting a nature center and driving for pleasure. All of these recreational activities are currently offered at CMSRA and many current offerings can be enhanced with careful planning.

II. CMSRA RECREATIONAL FACILITIES AND OTHER INFRASTRUCTURE

The CMSRA is managed for the protection, preservation and interpretation of the nationally significant geologic features which are evidence of the Wisconsinian stage of the continental glaciation, such as ice-walled lake plains, kettles and hummocks. As such, its infrastructure and recreational facilities are designed to allow recreational use while protecting the geographic features the property was created to protect, preserve and interpret.

OUTDOOR EDUCATION AND INTERPRETATION

The David R. Obey Ice Age Interpretive Center was built in 1991. The building's construction and exhibit development were partially funded by the National Park Service. Its operation and upkeep costs have been funded through the DNR.

The building contains a classroom, a large exhibit room with multimedia presentations, a gift shop area, a greeting desk, office space, break/meeting room, rest rooms, a fireplace and an area for live animal exhibits. Outside, the visitor is greeted by a native plant demonstration area, and a variety of birds at the many feeders. From the parking lot and from inside the building, the visitor can enjoy expansive views of the surrounding landscape, viewing the glacial moraine as well as the unglaciated hills off in the distance. The lawn area surrounding the north and west side of the building hosts school groups for outdoor activities such as tomahawk throwing and voyager paddle races. The building serves as a focal point for the property, welcoming visitors to the Chippewa Moraine and providing them with the information they need to get the most out of their visit. The center is open 6 days per week (closed on Mondays) and visitation is approximately 14,000 per year.

The adult visitors enjoy self-guided tours of its exhibits and short films covering topics such as cultural, geologic and natural history. Youth visitors are treated to opportunities to interact with the live animals including holding a snake and feeding the turtles. Additionally, the center plays an important role in school programs. Regional schools bring over 4,000 students per year to the center to see, touch, hear and discover Wisconsin's natural and cultural history. The students come from 20 different school districts covering a seven county area.

There are several open fields/grasslands on the property but two are of special importance for interpretation of the geologic features. The open field located directly south of the interpretive center has native prairie as its cover and is maintained with occasional burning. It is important because it provides vistas of the CMSRA and its kettle lakes. The other open field is located on Rattlesnake Hill and is important because it provides views of the incised ice-walled lake plain which it is located on. This open area is maintained through mowing and brushing on a portion of it, and agricultural practices on the other.

HUNTING AND TRAPPING

Hunting and trapping are permitted on the property with some restrictions. Hunting on state land along the Ice Age Trail corridor and near the interpretation center is restricted. An easement on the southern border, just north of 245th is open to the public but closed for hunting and fishing as is the northern half of North of North Shattuck Lake State Natural Area (north of 267th Ave.) And finally, the scenic easement on the southwest corner of the property is closed to all public access.

HIKING

Approximately eight miles of the Ice Age Trail traverses the Chippewa Moraine Ice Age Scientific Reserve Unit traveling over both DNR lands and county forest lands. Approximately 4.7 miles lie on DNR managed lands and 3.6 miles lie on county forest lands within the Reserve.

A national as well as a State Scenic Trail, the 1,000-mile Ice Age Trail will ultimately go from Interstate Park to Potawatomi State Park. The DNR has the primary responsibility for managing the trail on its properties.

In addition to the Ice Age Trail, there are seven miles of loop hiking trails on the CMSRA, originating at the interpretive center. The Mammoth Nature Trail is 0.7 miles long, the Dry Lake Trail is 1.8 miles long and the Circle Trail is 4.5 miles long. All of these trails originate at the interpretive center located on CTH M. During the winter, the CMSRA's trails are open to snowshoeing, hiking and cross-country skiing. Seventy pairs of snowshoes are available for use by the public. The trails are not groomed.

A club-maintained regional snowmobile trail traverses the far western corner of the property near Oak Lane (267th Avenue) and again at the southeastern corner near CTH AA.

CAMPING

Three hike-in "outpost" campsites are available on a first-come, first-served basis. Quiet and scenic, these sites provide a peaceful experience for those who enjoy primitive camping. Each site has a fire ring and open-air toilet. Two of the sites are within a half mile of the interpretive center along the Ice Age Trail. The third campsite is a canoe-in site on Town Line Lake, about five miles away from the center. Campers register at the interpretive center before heading out. Camping fees currently are \$16 (residents) or \$21 (non-residents) per night.

PICNIC AREAS

Picnic tables are provided outside of the interpretive center. There are no other developed day use areas on the property.

BOATING, FISHING, CANOEING AND KAYAKING

North and South Shattuck, Dark, Jeanstow, Town Line and Plummer lakes offer boating, canoeing and kayaking opportunities. Many smaller named and unnamed lakes dot the property. Fishing from shore and from water craft is a popular activity, as is ice fishing. While motorized access is currently allowed on all CMSRA lakes, their small size discourages motorized use on most of them.

WATER ACCESS

Two boat launches are located around the property. In addition, close proximity of town roads to many of the small scattered lakes provides carry-in access for watercraft in undesignated areas.

OTHER BUILDINGS AND INFRASTRUCTURE

There are 13 DNR owned buildings on the CMSRA. Only one, the David R. Obey Ice Age Interpretive Center, is open to the public at this time. Four are buildings that remain on the recently acquired Sybaquay Girl Scout Camp parcel. Two dining halls (unit houses), a large program building and a boat house remain from the parcel's previous use. The remaining nine buildings are scattered around the property and are a collection of garages, small homes, a log cabin and two latrines. In addition to the buildings, there are around 40 tent platforms with wood roofs and screen walls that had been used to house the Girl Scout campers when the camp was functioning.

III. VEGETATION

Current vegetation of the property has been influenced by many historical factors including logging in the mid- to late-1800s, homesteading and farming attempts, wildfires, and, depending on the type of natural community, fire suppression. Current factors that influence the vegetation include wildlife and recreation management, forest management and ecological restoration. Finally, broad environmental factors have a profound impact on the vegetation including geology, soils, natural hydrology and weather and climate. The property is a complex of uplands, wetlands and lakes. The current cover types on the CMSRA property, including their acreages and distribution, are shown of Table 1 and Map B-3.

Forests and Woodlands: A number of characteristics set the forests of northern Chippewa County apart from others in the state. The proximity of the tension zone provides for unique tree species assemblages: from west to east there is a remarkably fast transition from prairie, to oak woodland, to mixed oak, to northern hardwood, to more boreal forest types, with a number of conifers among the canopy dominants. Species composition on a given site is strongly influenced by glacial landform (slope and aspect) and deposition (soils and drainage), and northern Chippewa County is unusually heterogeneous in both respects. Historically, fire also played an important role in determining forest composition.

On the Ice Age Reserve, of which the CMSRA is a part, the forest is dominated by oak. Typically these oak stands are 80 to 110 years old and are dominated by red oak. The proportion of white, northern pin and bur oak increases as one moves west. Associates may include paper birch, trembling and bigtooth aspens and younger northern hardwoods, especially ash, basswood and red and sugar maples. While the forest on the recently acquired Larrabee Lake tract generally has good quality, the southern dry-mesic forest on Sybaquay is of variable quality. Canopy species dominance and tree size in the better quality forest is similar at the two tracts as is species composition. Historically, many of these forests contained a supercanopy of white and red pine.

Wetlands: Northern Chippewa County wetlands have some attributes that make them unique on a statewide level. Many of them occur along the edge of the terminal moraine, where glacial till is deep and provides more variable soils and water chemistry than wetlands farther north and east. Many of these wetlands have remained intact because the uneven topography of the moraine makes them difficult to drain and convert to other uses.

Northern Chippewa County is also home to the southernmost extent of some northern-adapted wetland types. The overlapping of southern and northern vegetation communities creates a diverse mosaic of habitats, including some that support rare species. Perhaps most importantly, wetlands on the property are generally less affected at this time by invasive plant species such as reed canary grass, purple loosestrife and glossy buckthorn than those in other parts of the state, especially those near areas that receive heavy use for agricultural and residential purposes.

Wetland communities include open wetlands such as Emergent Marsh, Northern Sedge Meadow, Alder Thicket, Poor Fen, Open Bog and Shrub Carr. Forested wetland communities present include Northern Wet Forest, Northern Tamarack Swamp and Northern Hardwood Swamp. Ephemeral Ponds are scattered across the study area and on the property.

IV. RARE SPECIES, ECOLOGICAL RESOURCES AND THEIR SIGNIFICANCE

The outstanding landscape feature is a rugged, mostly forested terminal moraine, pitted with hundreds of glacial kettle lakes and wetlands. Though these lakes and wetlands are not large, they are abundant and mostly intact. The local watersheds are generally forested, and the vegetation is less fragmented by agricultural and residential uses than is the case in lands to the south and the west. The wetlands associated with the terminal moraine are in generally good condition, and include examples of many native wetland communities. The concentration of undeveloped kettle lakes is noteworthy at state and regional scales, and this landscape also supports other aquatic features of high ecological value such as Ephemeral Ponds, Spring Seeps and Headwaters Streams.

Other valuable natural features occur at scattered locations throughout the property. These include relatively isolated examples of natural communities, waterbodies, or populations of rare species.

- **Older Southern Dry-mesic Forest.** Several significant blocks of fair to high-quality southern dry- mesic forest occur on the property. The DNR has identified a need to conserve, protect and manage old-growth forests. The juxtaposition of the forests on the property within larger forested blocks is important for area- dependent species such as forest interior birds. Additional maturation of these forests will enhance their value to many plant and animal species. Southern Dry-mesic Forests are unusual in the landscape and provide habitat for more southerly bird species. Over the long-term, better representation of conifers (white and red pines on the appropriate dry-mesic sites) would further enhance the ecological values of the area to species that are not well represented there now.

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- **High Quality Wetlands.** The wetlands on these tracts are diverse and include Muskeg, Northern Tamarack Swamp, Northern Wet Forest (likely Black Spruce Swamp), Northern Hardwood Swamp, Alder Thicket, Emergent Marsh, Open Bog, Poor Fen and Northern Sedge Meadow. The quality of these communities ranges from fair to good. The wetlands are important for local diversity and provide valuable habitat for a number of species, including rare and SGCN birds.
- **Ephemeral Ponds and Associated Fauna.** Ephemeral ponds are scattered on the CMSRA. Ephemeral ponds provide habitat for a range of species, including SGCN amphibians and invertebrates that require fishless ponds for their life cycles.
- **Geologic Features.** Two types of glacial landforms, ice-walled lake features and kettle lakes, are of particular importance on the property. Northern Chippewa County has some of the best examples of ice-walled lake features in the state.

V. CONCLUSION

The generally “wild” nature of the CMSRA, embedded in the larger public open spaces of the Chippewa County forest lands can provide a recreational experience of quiet solitude and a sense of remoteness in a scenic natural-appearing environment that is increasingly rare in Wisconsin. The property is uniquely well suited for low-impact, lightly developed style of recreation.



CHAPTER FOUR: ASSESSMENT OF THE ENVIRONMENTAL IMPACTS OF THE MASTER PLAN

I. INTRODUCTION

This analysis discloses the environmental impacts, both positive and negative, of the actions recommended in this master plan to decision-makers and the public. This analysis focuses on the actions that are new or are changes to the current management, development and use of the property. Based on the information presented in this master plan, the proposed actions are anticipated to have many net beneficial environmental effects and are not anticipated to cause significant adverse environmental effects.

II. IMPACTS TO NATURAL RESOURCES

SOILS

The probability of significant short-term or long-term cumulative impacts due to soil erosion is low for the management activities prescribed in the CMSRA Master Plan. This is due to the relatively low percentage of land in the plan area that is disturbed by management activities at any given time. The more disruptive management activities (e.g., timber harvesting) may affect 100 acres over a five year period. Soil erosion on parcels during timber harvesting operations would be minimized by the use of the Best Management Practices (BMPs) for Water Quality guidelines. BMPs contain strict standards for road construction, water crossings, skid trails and logging landings. All trails and primitive roads would be monitored for signs of excessive soil erosion caused by management activities or recreational use and actions would be taken (e.g., BMPs or trail closings) to minimize the erosion potential.

GEOLOGICAL RESOURCES AND LANDFORMS

A primary function of the property is to protect geological resources and glacial landforms. The actions proposed in this plan would not have a detrimental effect on these resources.

AIR QUALITY

Potential impacts to air quality would come primarily from prescribed burns. Local landowners and units of government would be notified prior to management burns. Prescribed burns would occur seasonally (typically spring and fall). The burn plan contains best management practices and procedures to safely manage the fire and includes measures to minimize nuisance smoke impacts.

Construction activities that may generate small amounts of dust include trail, road and parking lot construction and maintenance. Water is the most common dust suppression practice used during road construction. Impacts on air quality from fugitive dust particles and engine exhaust emissions from construction equipment would be small and transitory in nature. When construction is complete no residual impacts to air quality would be detectable.

Vehicle emissions generated by motor vehicles and certain management activities, such as timber harvesting, would be less than or comparable to adjacent roadways and similar activities (e.g., forest management, agriculture) in the area.

WATER RESOURCES

Sanitary Systems and Vault Toilets

Existing and new sanitary systems would be maintained or constructed to meet all applicable building codes. No adverse impacts from sanitary systems on the property are anticipated.

Water Quality of Surface Waters and Wetlands

Maintaining permanent vegetative cover and the application of BMPs during management activities would have an overall positive impact on both surface waters and wetlands. The impacts of stormwater runoff during timber harvesting would be mitigated by implementing appropriate best management practices. These practices are described in the “Wisconsin’s Forestry Best Management Practices for Water Quality” field manual and are part of every timber harvest on the CMSRA.

Impervious surface, which has the effect of preventing infiltration and increasing water runoff, would be kept to a minimum on the property. Pervious road and pathway surfaces would be used where impervious surfaces are not needed. Runoff from roadways and other impervious surfaces would not drain directly into nearby streams and lakes, minimizing water pollution risks. Under the proposed plan there would be no appreciable change and potentially a small reduction in impervious surface area on the property.

VEGETATION

The vegetation management strategies in this master plan (described in Chapter Two) are intended to maintain or improve the quality of native and restored habitats. Primary objectives of this plan are to maintain and enhance forests; particularly larger blocks of closed canopy, older forest; and to protect and enhance lakes and wetlands.

Vegetation management objectives outlined in the CMSRA Master Plan include:

- Protect and enhance the natural, scenic character of the area. Provide an attractive, natural appearing forest with old growth characteristics such as larger diameter trees and large blocks of closed canopy conditions that provides habitat for species requiring older forests.
- Maintain and expand the acreage of oak dominated stands and larger blocks of closed canopy forest conditions and increase the presence of larger, older trees and old growth forest community characteristics.
- Protect and maintain the area's high quality wetlands, ephemeral ponds, and lakes.
- Monitor and control invasive plants, insects, and forest pests and diseases as practicable.

Active management to maintain and expand oak as well as to speed the development of older forest characteristics, such as larger trees and larger blocks of closed canopy forest would occur on approximately 1,500 acres of forest land. Most of the planned changes to the composition and structure would occur slowly over the next 50 years so impacts are minimized. Overall, across the property the changes to vegetative cover types would generally be slow and heavily influenced by the forces of natural succession.

DNR policies that address the monitoring, inspection and control of invasive species would be followed. Infestations of Canada thistle, Dame's rocket, garlic mustard, hemp nettle, spotted knapweed, common buckthorn, and Eurasian honeysuckle have been documented on the CMSRA. Other common wetland invasives noted to occur within the vicinity of the CMSRA include purple loosestrife, narrow-leaf & hybrid cattails, and reed canary grass. Aquatic invasive species noted to occur within the vicinity of the CMSRA include curly-leaf pondweed, eurasian water-milfoil, banded mystery snail, Chinese mystery snail, rusty crayfish, and zebra mussel.

Control measures may include mechanical control, use of herbicides, and fire. The effect would be the maintenance of native biotic communities and protection from future invasions.

WILDLIFE AND FISHERIES

The actions proposed in this master plan would be a benefit for many species of resident and migratory wildlife. Proposed habitat management would enhance the quality and extent of habitat for wildlife, birds particularly, that favor larger blocks of older forest. This type of habitat is limited in the region and state. Maintaining and protecting the abundant, high quality wetlands and ephemeral ponds also provides significant and important habitat for a variety of wetland-dependent species including herptiles, invertebrates, and certain species of birds.

The management objectives and prescriptions outlined in Chapter Two would maintain the forest, wetland, shrub, and aquatic habitats needed by the game and non-game wildlife species found on the CMSRA property.

The fishery on many of the lakes is impacted by winter kills that happen on a recurring basis. The proposed management would strive to maintain and enhance fishing opportunities on these lakes as is practicable through stocking. The winter kill exception is Hodge Lake. It provides a quality panfishery, and the proposed management strives to maintain it.

ENDANGERED, THREATENED AND RARE SPECIES, NATIVE COMMUNITIES AND SCARCE ECOLOGICAL RESOURCES

Red shouldered hawk and cerulean warbler are known on the property. Proposed management to protect and enhance larger blocks of closed canopy forest would benefit these birds. The proposed management objectives and prescriptions are expected to cause few, if any, negative impacts to endangered, threatened and rare species while yielding significant medium to long-term benefits.

III. IMPACTS TO RECREATIONAL FACILITIES AND OPPORTUNITIES

VISUAL/SCENIC RESOURCES

Overall, the management would maintain the high natural visual quality and wild character of the property. However, the introduction of active forest management (selective harvesting and prescribed fire) on approximately 1,500 acres would introduce visual signs of management where it does not now exist as active forest management does not occur under the current plan. Fire is a valuable tool for maintaining oak. An estimated 100 to 200 acres may be burned per year, if conditions allow. Approximately 100 acres may see timber harvesting activity (selective harvests or small patch cuts) over any five year period. When and where timber harvests occur, the highest visibility of management activity would last several years and decrease as the residual slash decomposes. Tree stumps would remain much longer. Active actions would be taken to reduce the visibility of harvest activity along designated trails, campsites and other public use site would be taken. At times and for durations of days or weeks, management activities, such as prescribed burns, timber harvesting, or trail maintenance work may close limited sections of trail, or cause elevated noise levels on a portion of the property. To the degree practicable, managers would strive to minimize such impacts by conducting management during seasons of lower public use; even so, at times there may be temporary, short-term disruptions of recreational activities in limited locations.

Overall, small changes in the visual qualities and aesthetics of the plant communities would occur over time as the forest matures and develops older forest characteristics, such as larger diameter trees and dead and down trees. The proposed development of additional trails and hike-in primitive campsites is compatible with the character of the property and would have very little visual impact. Removal of the old structures of the Girl Scout Camp would enhance the property's natural, undeveloped character.

RECREATIONAL USE AND OPPORTUNITY

Recreational Setting:

A primary management goal for the CMSRA is to provide recreational users with the opportunity to enjoy a range of low-impact, non-motorized recreational uses, particularly hiking, canoeing/kayaking, and primitive camping in a natural appearing, semi-primitive setting offering a sense of solitude and remoteness.

One of the tools for providing and maintaining this recreational use environment is the designation of a large portion of the CMSRA as Type 2 and Type 3, non-motorized Recreational Use Settings. These designations assign specific standards for the level of development and the visual character of development of structures and trails, in addition to restricting motorized public uses. Much of the remaining acreage of the property that is not within a Type 2 or Type 3 Setting are designated State Natural Areas, which by their purpose have little development and, with few exceptions, allow only non-motorized uses. The proposed plan would continue to

provide abundant opportunities for enjoyment of non-motorized recreational activities in a lightly developed, semi-primitive setting.

Hunting and Fishing:

Hunting and fishing opportunities would remain unchanged under the proposed management.

Paddling:

Opportunities for canoe and kayak paddling would be maintained and improved with the addition of the Hodge Lake and the South Shattuck Lake carry-in landings. All existing water access points would be maintained.

Hiking:

Hiking opportunities would be expanded with the addition of just over eight miles of new trail. The new trail additions would offer more opportunities for people seeking shorter loop hikes.

The Ice Age Trail access and routing would remain unchanged.

Camping:

Camping would be expanded to include eight additional remote, primitive campsites in the Hodge Lake area.

Hunting, Fishing, and Trapping:

The CMSRA is popular for fishing, large and small game hunting, and trapping. The proposed plan would continue to provide habitat for popular species as well as current levels of access. Hunting, fishing, and trapping opportunities would be maintained.

Interpretation and Education:

Under the plan, interpretation and education programs continue.

IV. SOCIO-ECONOMIC IMPACTS

TIMBER PRODUCTS

The primary purpose of forest management on the CMSRA is to protect and enhance native communities as well as maintain the desired setting for recreational uses. Timber production as part of sustainable forest management is an important management tool for meeting these objectives, but it is a secondary purpose of these forests. While not a primary goal, timber production has value and provides multiple benefits, including employment in forest-based industries, revenues for property managers, and habitat improvement.

Commercial timber harvests would be an integral part of management on the CMSRA property under this master plan. There are approximately 1,500 acres on the property where management employing commercial harvesting is one of the prescribed management tools. The

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longer-term harvest goal (15-year average) indicates that every five years approximately 100 acres could have some harvest activity. Timber revenue to the state is estimated to be from \$600 to \$800 dollars per acre. The revenue amount would vary depending on the amount and quality and the species harvested and the market value at the time.

TRANSPORTATION

While use of the property is expected to grow in the future as the regional population grows, the proposed plan would not draw a significant number of new visitors. As a result, there would be no adverse impact on highway traffic in the area.

NOISE

Noise impacts from management activities and the expected recreational uses are anticipated to continue to be minimal on CMSRA property neighbors and users. Most other noise impacts would be generated primarily from land management, forestry and trail construction and maintenance activities. Such noise would be generated by chainsaws, skidders, machinery, and trucks. These noises would occur primarily during daylight hours and would be peak (high level, short duration) rather than continuous in nature. The noise often would be seasonal and transient (i.e., once the activity is completed the noise source would be eliminated).

PUBLIC SAFETY

There are no elements of the CMSRA Master Plan that are anticipated to have a negative effect on public safety. Designated use areas (such as parking lots) are inspected semi-annually to locate and remove hazardous trees. In addition, public safety precautions are taken when using herbicides, pesticides, fire, and in other property management activities. Prescribed fires would be used in forest and native community management. All prescribed fires would follow DNR safety and burn procedures.

LAND USE

As the proposed plan largely continues the overall existing conditions on the property, except for the introduction of limited timber harvesting, the plan would not change the property's overall land use or generate new land use changes on adjacent lands.

CULTURAL RESOURCES

There are no recorded historic or archaeological sites on the CMSRA. However, archaeological surveys have been very limited in this area. The presence of many lakes and wetlands suggest there may be the potential that sites are present. Management policies (S. 44.40, Wisconsin Statutes and Manual Code 1810.10) require that any activities with the potential to disturb archaeological sites would only be undertaken after consultation with the department archaeologist. Any sites with cultural or historical value identified in the future would be managed in accordance with DNR guidance and statutory requirements (see Wis. Stats. 44.40 and Manual Code 1810.10). The risk to historic and archaeological resources is very low due to the low level of soil-disturbing management activities proposed and the measures that would be taken to protect any sites that may be discovered.

ECONOMIC EFFECTS AND THEIR SIGNIFICANCE

Implementation of the proposed plan would not generate any significant economic impact.

Overall, the current level of economic benefit would continue. A discussion of various economic benefits of public lands from a statewide perspective is provided in the Introduction section of Chapter Two. The CMSRA draws visitors from the local area, the surrounding region, and some users from out of state. Some local economic benefits already result from these visitors to the plan area, primarily in the form of day-visit tourist expenditures (purchases for meals, gasoline, sporting equipment, etc.), and this is expected to continue. Forest management on the property contributes to the local logging industry. Timber harvests that occur would contribute to the local supply of wood products. A small increase in annual timber products harvested is projected.

These harvests would add to the local economy through cash to the landowners and wages for laborers in the field, and primary and secondary forest products industries.

FISCAL EFFECTS ON LOCAL GOVERNMENT

This plan would not generate any change in the fiscal effects on local government expenses or revenues.

State law requires the department to make payments in lieu of property taxes (PILT) to ensure the affected town's property base is not adversely affected. There are two separate state statutes, and several formulas under each, that dictate the amount of these payments.

Wisconsin Statute 70.113 applies to land acquired by the department prior to January 1, 1992. Payments under this statute are made directly to the taxation district in which the land is located. Schools, VTAE and counties do not receive any payment under this law.

Wisconsin Statute 70.114 governs payments in lieu of property taxes for all lands purchased by the department after January 1, 1992. This law has been amended several times so the specific formula used to determine individual payments varies depending on when the property was acquired and how it was acquired.

The department uses an automated process for collecting information and calculating PILT payments. The process is determined by statute with little room for interpretation or calculation by the department. For further details, please refer to the applicable state statutes or visit the department web site at <http://dnr.wi.gov/> and perform a search for "Payment in Lieu of Taxes".

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FISCAL EFFECTS ON STATE GOVERNMENT

Estimated Costs of Facility Development:

The total cost of all CMSRA improvements is projected to be approximately \$228,000 (in 2017 dollars). A general cost breakdown is provided below; a more detailed cost estimate is shown in Table 2-5 (see Chapter 2).

• Building Removal	\$47,540
• Recreation Development/Improvements	\$63,080
• Access Improvements	\$77,629
• 20% Contingency	\$37,950
• Total	\$227,699

Projected Staffing and Estimated Annual Operations Cost and Revenue:

State operational costs under the proposed plan would be based upon appropriate staffing levels to provide visitor services, resource protection, and educational opportunities. The on-going operational staffing will be evaluated with department metrics and standards to provide safe public access.

Revenue Projections:

- Camping fees: \$2,400 annually
- Timber harvest revenue: ~ \$60,000 to \$80,000 every five years

IMPACTS OF BOUNDARY ADJUSTMENTS

The plan proposes to extend the CMSRA project boundary around the northern portion of the North of North Shattuck Lake State Natural Area (126 acres) which lies outside of the current CMSRA boundary. The 126 acres to be included within the CMSRA are currently in DNR ownership and managed by the department in conjunction with the southern portion (297 acres) of the SNA. The CMSRA acreage goal would be increased by 126 acres. This is an administrative “housekeeping” measure to bring all of the SNA within the recreation area boundary. There would be no fiscal impact and the current net unfulfilled authority (783 acres) for the CMSRA would remain unchanged.

IMPACTS ON ENERGY CONSUMPTION

Due to the limited amount of infrastructure development and renovation proposed, no significant impacts to energy consumption are expected.

V. CUMULATIVE EFFECTS, RISK AND PRECEDENT

SIGNIFICANCE OF CUMULATIVE EFFECTS

Overall, the proposed actions are anticipated to have positive long-term effects on the quality of the natural environment and recreational users. Over time, management to protect and enhance blocks of older growth, closed canopy forest, a limited habitat type within the region and state, would benefit wildlife that depends this community. Likewise, opportunities for recreating in a large, semi-primitive area are limited in the region and state and would likely become rarer over time.

SIGNIFICANCE OF RISK

Management of the CMSRA property poses a low overall potential for risk to the environment. The proposed low level of resource management activities are activities that typically have less negative and more positive environmental impact than the surrounding residential and agricultural lands.

Only a small percentage of the total CMSRA land would have active management in any single year. Timber harvesting would average about 100 acres every five years with about 15 years between harvest activity on any stand. No high-risk actions are proposed, nor are any actions which involve an irretrievable commitment of resources, or actions that could not be reversed in the future.

The presence of motor vehicles and other equipment during construction and logging may pose a slight but insignificant risk from spills and erosion. These risks would be mitigated by best management practice requirements and at preconstruction meetings with contractors.

Fire has been identified as one of the most effective vegetative management tools for management of grasslands and some wetlands and forests. Necessary precautions and DNR procedures are always followed during prescribed burns, including having an approved burn plan and adequate fire-fighting equipment and personnel present on site. During periods of high fire danger, burning restrictions are put into effect and a complete burning ban may be implemented. Herbicide/pesticide use would strictly follow label instructions to protect the environment and public safety.

SIGNIFICANCE OF PRECEDENT

Approval of this master plan revision would not directly influence future decisions on other department property master plans. Implementation of the actions contained in this master plan would not be precedent-setting, primarily because the proposed land management, development, and recreational activities have largely been conducted on this property in the past.

VI. WEPA COMPLIANCE

Property planning under Ch. NR 44, Wis. Admin. Code, is an integrated analysis action under NR 150.20(2) (a)1., Wis. Admin Code, and therefore complies with the Wisconsin Environmental Policy Act, s. 1.11, Stats.

CHAPTER FIVE: ALTERNATIVES CONSIDERED BUT NOT SELECTED

This chapter describes the management and development significant alternatives that were considered during the development of this master plan.

I. RECREATION MANAGEMENT ALTERNATIVES

Two development alternatives were evaluated for the Hodge Lake Area (the old Girl Scout camp), in addition to the no change alternative.

NO CHANGE - STATUS QUO ALTERNATIVE

This alternative maintains the existing CMSRA public recreational facilities, opportunities and programs without any changes. This alternative was not selected.

HODGE LAKE AREA DEVELOPMENT ALTERNATIVE ONE: RUSTIC CART-IN CAMPGROUND, REMOTE CAMPING, AND MORE TRAILS

Under this alternative a rustic, cart-in campground with up to 12 campsites would be developed near the Hodge Lake shore. This proposed development included a small beach and carry-in boat landing. Also, four primitive, remote campsites would be built in other locations in the Hodge Lake Area plus up to 5 miles of new trails would be added.

Some public comments we received expressed concern that the level of development necessary to accommodate the cart-in rustic sites was incompatible with the “wilderness” feel of the property. This alternative was not selected.

HODGE LAKE AREA DEVELOPMENT ALTERNATIVE TWO: DAY USE AREAS WITH SHELTER BUILDINGS

This alternative focuses on redevelopment of the former Girl Scout Camp site, including re-use of their two unit houses and the program center building for shelter buildings. There is potential to develop up to three day use areas near Hodge Lake. A beach area and a carry-in boat access were part of the development.

It was determined that there is low demand for more developed day use areas in the county and nearby counties. There are four county park day use areas with reservable shelters (two in the immediate area of the CMSRA) and the rustic log pavilion at Brunet Island State Park that meet the needs. The anticipated low level of use and demand did not justify the expense of development and maintenance of new day use areas. Additionally, this more intensive level of development and use are somewhat incompatible with the goals for the property. This alternative was not selected.

The recommended action: Maintain existing recreation and outdoor education facilities. In addition, develop up to seven miles of primitive trail at Hodge Lake and another additional two miles of primitive hiking trail south of South Shattuck Lake and up to 8 remote campsites scattered around the property. See Chapter Two for additional details.

II. VEGETATIVE MANAGEMENT ALTERNATIVES

NO CHANGE - STATUS QUO ALTERNATIVE

The forest and other vegetation communities have been passively managed. The exception is prescribed burning of several grass land sites. If this management approach is continued, opportunities to enhance management to maintain oak forest type would be reduced. This alternative was not selected.

ALTERNATIVE ONE: ACTIVE FORESTS AND HABITAT MANAGEMENT

Active forest and habitat management (e.g. timber harvesting) across the entire property was considered. Active forest harvesting is not consistent with the old forest native community management objectives on portions of the property. This alternative was not selected.

The recommended action: Implement a combination of active and passive management to provide blocks of closed canopy forest and an older growth forest of northern hardwoods. See Chapter Two for additional details.

III. STATE NATURAL AREA MANAGEMENT ALTERNATIVES

NO CHANGE - STATUS QUO ALTERNATIVE

The “no change” alternative would leave the State Natural Area boundaries where they are. The boundaries do not include high quality native communities that are adjacent to the current boundaries. Under the no-change alternative the additional protections offered by SNA designation would not occur on those lands. This alternative was not selected.

The recommended action: As described in Chapter Two, the plan calls for the expansion of the of the North of North Shattuck Lake and the Town Line Lake and Woods State Natural Areas by 373 acres, which would bring in additional high quality native communities and to provide more logical boundaries for vegetation management activities.

IV. CMSRA PROPERTY BOUNDARY ALTERNATIVES

NO CHANGE- STATUS QUO

The no-change alternative, would leave the project boundaries in their current location. This would mean that portion of the North of North Shattuck Lake State Natural Area would remain not included within the CMSRA, even though it is included within the master plan and is managed as part of the CMSRA property. Maintaining a portion of the lands under the CMSRA master plan outside of the boundary would likely contribute to confusion for the public and for department record keeping. This alternative was not selected.

ALTERNATIVE ONE: EXPAND PROJECT BOUNDARY TO INCLUDE DNR AND PRIVATE LAND

Inclusion of the 50 acre privately owned tract on the east shore of Salisbury Lake in the project area would support the planned expansion of the Ice Age Trail to connect to a proposed new

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trail head on STH 40. This boundary expansion would authorize the department to purchase those lands. The trail expansion and new trail head may not occur without the acquisition. This alternative was not selected.

ALTERNATIVE TWO: EXPAND THE PROJECT BOUNDARY TO TAKE IN ONLY EXISTING DNR OWNED LANDS IN THE NORTH OF NORTH SHATTUCK LAKE SNA.

Another option is to expand the CMSRA boundary to include ONLY that portion of the North of North Shattuck Lake SNA lying outside of the CMSRA property (the Larabee Lake addition).

The recommended action: Expand the project boundary to take in the Larabee Lake addition to the North of North Shattuck Lake State Natural Area (DNR owned lands). See Chapter Two for additional details.